St. Cloud City Council Regular Meeting
Thursday, November 13, 2025
St. Cloud Community Center
3101 17th Street
6:30 PM
Agenda

Welcome to our Council meeting. In the interest of time efficiency and ensuring that everyone who wishes to address the Council is given the opportunity to do so, the following will apply to all comments made by the public. Each speaker shall be allotted 3 minutes to address the Council, unless such time is extended by the Mayor or by questions from Council. Groups shall designate a spokesperson to avoid repetition of comments. Every effort will be made to avoid interrupting speakers. Thank you for participating in your City Government.

I. Call to Order

II. Invocation

III. Pledge of Allegiance

IV. Roll Call

- Mayor Chris Robertson
- Deputy Mayor Ken Gilbert
- Council Member Jennifer A. Paul
- Council Member Kolby Urban
- Council Member Shawn Fletcher

V. Agenda Update

To include continued or add-on items, corrections, and/or deletions of existing items as submitted by the City Manager.

VI. Presentations

- Presentation of Employee of the Month for the Month of November to Oakley R. Gray

VII. Consent Agenda

The next portion of tonight's meeting is the consent agenda which contains items that have been determined to be routine and non-controversial. If anyone in the audience wishes to address a particular item on the consent agenda, now is the opportunity for you to do so. Additionally, if staff or members of the City Council wish to speak on a consent item, they have the same opportunity.

1) Resolution No. 2025-160R, a resolution of the City Council of the City of St. Cloud, Florida, approving an agreement between the City of St. Cloud and St. Cloud Main Street, Inc. for funding a contribution in support of the St. Cloud Main Street program in an amount not to exceed seventy thousand dollars ($70,000) annually subject to annual appropriation by the City Council; authorizing the Mayor to

execute the agreement and providing for an effective date.
COST: up to $70,000.00
This is item to approve execution of the agreement between the City and St. Cloud Main Street, Inc. in the amount of $70,000 for professional services.

2) Resolution No. 2025-161R, a resolution of the City Council of the City of St. Cloud, Florida, authorizing the City Manager to enter into a task authorization to the contract and agreement for Continuing Professional Civil Engineering Services with Wright-Pierce, Inc. dated January 5, 2023 for Design Services for Rummell Road Roundabout, and any amendments thereto, and providing an effective date.
COST: up to $198,000.00
This item is to approve a task authorization with Wright-Pierce, Inc. for design services for Rummell Road Roundabout.

3) Resolution No. 2025-162R, a resolution of the City Council of the City of St. Cloud, Florida, authorizing the City Manager to enter into a task authorization to the contract and agreement for Alternative Paving Methods with American Persian Engineering & Construction, LLC, dba APEC, LLC dated February 16, 2022, and any amendments thereto, for asphalt paving in the Southern Pines and Esprit neighborhoods and others, and providing an effective date.
COST: up to $1,584,000.00
This item is to approve a task authorization with American Persian Engineering & Construction, LLC, dba APEC, LLC for Asphalt Paving in the Southern Pines and Esprit neighborhoods and others.

4) Resolution No. 2025-163R, a resolution of the City Council of the City of St. Cloud, Florida, authorizing the utilization of State of Florida Term Contract No. 92121500-24-STC, previously advertised for bid, which is reasonable and otherwise in the best interest of the City of St. Cloud, whose subject matter is Security Guard Services, providing for the award thereof to Universal Protection Service, LLC, d/b/a Allied Universal Security Services, LLC, and providing an effective date.
COST: Undetermined at this time as goods and services are provided on an as-needed basis. This contract will be utilized by various City departments on an as-needed basis from various approved projects and budgeted expenditure accounts.
This item is to approve an agreement for security guard services.

5) Resolution No. 2025-165R, a resolution of the City Council of the City of St. Cloud, Florida, authorizing the grant application by City of St. Cloud/St. Cloud Police Department under the Florida Department of Health (DOH) FY 2026-2027 EMS Matching Grant Solicitation for thirty-eight (38) LIFEPAK CR2 AEDs and authorizing the Grants Division or designee to submit the application, and the City Manager to execute the application and all other documents associated with the implementation and execution of the grant on behalf of St. Cloud Police Department.
COST: up to $23,145.00 (Project total $92,580.00 – State Share 75% - $69,435.00/ City Match 25% - $23,145.00)

This item is to authorize submitting an application for the FY 2026-2027 Florida Department of Health EMS Matching Grant.

6) Resolution No. 2025-167R, a resolution of the City Council of the City of St. Cloud, Florida authorizing the City Manager to execute the request to withdraw project 4337-222R from funding under the Florida Division of Emergency Management Hazard Mitigation Grant Program (HMGP) for the purpose of permitting and installation of a pump station at Blackberry Creek Ponds and providing an effective date.
COST: No cost associated with this item
This item is to authorize the City Manager to sign the Request to Withdraw Letter for the Blackberry Creek Pump Station project from Florida Department of Management HMGP funding.

7) Resolution No. 2025-169R, a resolution of the City Council of the City of St. Cloud, Florida, accepting the maintenance of Puffin Road from Osceola County and providing for an effective date.
COST: Estimated average annual maintenance cost of $8,200.00
This item is to add Puffin Road to the City's infrastructure inventory for ongoing maintenance.

8) Resolution No. 2025-170R, a resolution of the City Council of the City of St. Cloud, Florida, approving and authorizing the Mayor to enter into a Second Amendment to the May 28, 2025 Memorandum of Understanding agreement with the School Board of Osceola County, Osceola County, and Center Lake Properties, for the conveyance of property and right-of-way for Bluebird Groves Parkway and Massachusetts Avenue extension and providing for an effective date.
COST: Entering into a future Mobility Fee Credit Agreement for Bluebird Groves Parkway for an estimated $1,721,195.63 in mobility fee credits (unchanged from the original agreement).
This item is to approve Resolution No. 2025-170R authorizing the Mayor to enter into a Second Amendment to the May 28, 2025 Memorandum of Understanding between the School Board of Osceola County, Florida, Osceola County, and Center Lake Properties, LLLP, to obtain property to build both the Massachusetts Avenue Extension and Bluebird Groves Parkway.

9) Request City Council's approval of a Preliminary Subdivision Plan for Walker Property, PSP24-00001.
COST: No cost associated with this item.
This item is to approve the Preliminary Subdivision Plan for Walker Property, which contains 69 lots for single-family detached homes on approximately +/- 25.59 acres of land, generally located north of Old Oak Trail, east of Chisholm Road, south of Chisholm Park Trail, and west of south Narcoossee Road.

10) Request City Council's approval of Old Hickory Tree Estates Preliminary Subdivision Plan for Old Hickory Tree Estates (fka Vista Grand Properties), PSP25-00003

COST: No cost is associated with this item.
This item is to approve the Preliminary Subdivision Plan for Old Hickory Tree Estates (fka Vista Grand Properties), which contains 54 single-family detached dwelling units on approximately +/- 14.36 acres of land, generally located north of Gramercy Farms Boulevard, east of Old Hickory Tree Road, west of Hickory Tree Road, and south of Nolte Road.

11) Request City Council's approval of Old Hickory Tree Estates Final Master Plan (fka Vista Grand Properties), PUD24-00007
COST: No cost is associated with this item.
This item is to approve the Final Master Plan for Old Hickory Tree Estates (fka Vista Grand Properties), which contains 54 single-family detached dwelling units with site open space, amenities, and associated infrastructure on approximately +/- 14.36 acres of land, generally located north of Gramercy Farms Boulevard, east of Old Hickory Tree Road, west of Hickory Tree Road, and south of Nolte Road.

12) Minutes: July 10, 2025 / Regular Meeting

VIII. Citizens Forum

Any person who desires to comment on any item not on this agenda is provided this opportunity to address the City Council. Each person is requested to complete a sign-in form to be provided to the presiding officer prior to, or as soon as is practical thereafter, the person addresses the Council.

IX. Public Hearings

1) **PUBLIC HEARING FOR RESOLUTION NO. 2025-154R**, a resolution of the City Council of the City of St. Cloud, Florida, amending Resolution Number 2025-098R which adopted the fiscal year 2025/2026 budget for the City of St. Cloud, finding the City Manager has certified there are prior year fund balances and or current revenues available in the budget for additional projects and programs in various funds not included in the original budget, requiring the budget to be increased to include said additional funding in the various funds and making supplemental appropriations within the funds. (Above is full title) **ACTION ON RESOLUTION NO. 2025-154R**

2) **FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-58**, an ordinance of the City Council of the City of St. Cloud, Florida, amending the Land Development Code as follows: amending Growth Managmenet Services to read Community Development Department, Article I - Sec. 30-2(A) remove refundable performance bond, Sec. 30-3 add boat ramp hours, 30.4(A) amend dawn to dusk to read sunrise to sunset, Article II - Sec. 30-16 amending Major Special Event definition to Special Event, removing the event cap of 250 people and removing Minor Special Event definition, amending Sec. 30-18(A)(1) to Special Events and removing the cap of 250 people, Sec. 30-18(A)(2) removing Minor Special Events, amending Section 30-18(B) to remove a daily attendance of 250 person or greater, amending Sec. 30-

18(C)(1) removing the daily attendance of the event is greater than 250 persons or, amending Sec. 30-19 to remove Minor Special Event, Sec. 30-19(A) Limiting the number of special events within a calendar year and setting reservation requirements, Sec. 30-19(B)(3) setting requirements for who may act on an organization's behalf, 30-19(C) setting payment terms and providing conflict, severability codification and an effective date.(Above is full title) **ACTION ON ORDINANCE NO. 2025-58.**

3) **FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-67**, an ordinance of the City Council of the City of St. Cloud, Florida, providing for the Zoning Amendment of the Zoning Map of the Land Development Code of the City of St. Cloud, Florida, specifically changing the zoning designation of approximately +/- 17.35 acres identified as Harvest Grove PUD, Project #PUD24-00005, from "R-1B" Single-Family Dwelling to “PUD” Planned Unit Development, Preliminary Master Plan/Final Master Plan (PUD,PMP/FMP), generally located north of East Irlo Bronson Memorial Highway, east of South Narcoossee Road, south of Lillian Lee Road, and west of Puffin Road; providing for entering the designation on the official Zoning Map, filing of the Planning Commission recommendation and proof of publication, severability, and effective date. (Above is full title) **ACTION ON ORDINANCE NO. 2025-67** (This is a Quasi-Judicial proceeding)

4) **FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-72,** an ordinance of the City Council of the City of St. Cloud, Florida, assigning a Future Land Use Designation of approximately +/- 0.42 acres identified as Cavan Corner, Project #CPA25-00009, generally located north of East 12th Street, east of Mississippi Avenue, south of 11th Street and west of Eastern Avenue, from “MDR” Medium Density Residential to “COM” Commercial, providing for amending the official Future Land Use Map of the Comprehensive Plan, filing of the Planning Commission recommendation and proof of publication, applicability and effect, severability, copies on file and effective date. (Above is full title) **ACTION ON ORDINANCE NO. 2025-72**

5) **FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-73,** an ordinance of the City Council of the City of St. Cloud, Florida, providing for the Zoning Amendment of the Zoning Map of the Land Development Code of the City of St. Cloud, Florida, specifically changing the zoning designation of approximately +/- 0.42 acres identified as Cavan Corner Project #ZMA25-00013, from "R-2” Single & Two-Family Dwelling to "BC" Business Commercial, generally located north of East 12th Street, east of Mississippi Avenue, south of 11th Street and west of Eastern Avenue, providing for entering the designation on the official Zoning Map, filing of the Planning Commission recommendation and proof of publication, severability, and effective date. (Above is full title) **ACTION ON ORDINANCE NO. 2025-73** (This is a Quasi-Judicial proceeding)

6) **FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-74,** an ordinance of the City Council of the City of St. Cloud, Florida, to annex into the City of St. Cloud approximately +/- 6.20 acres identified as Nova Road Community Center, Project

#ANX25-00018, generally located north of Lake Lizzie Drive, southeast of Nova Road, and west of Druliner Road; in accordance with the Voluntary Annexation Provisions of Chapter 171.044, Florida Statutes. (Above is full title) **ACTION ON ORDINANCE NO. 2025-74**

7) **FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-75,** an ordinance of the City Council of the City of St. Cloud, Florida, assigning a Future Land Use Designation of approximately +/- 6.20 acres identified as Nova Road Community Center, Project #CPA25-00008, generally located north of Lake Lizzie Drive, southeast of Nova Road, and west of Druliner Road; from “CCC” Community Center (County) to “CCC” Community Center (City), providing for amending the official Future Land Use Map of the Comprehensive Plan, filing of the Planning Commission recommendation and proof of publication, applicability and effect, severability, copies on file and effective date. (Above is full title) **ACTION ON ORDINANCE NO. 2025-75**

8) **FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-76,** an ordinance of the City Council of the City of St. Cloud, Florida, providing for the Zoning Amendment of the Zoning Map of the Land Development Code of the City of St. Cloud, Florida, specifically changing the zoning designation of approximately +/- 6.20 acres identified as Nova Road Community Center, Project #ZMA25-00012, from "CR" Commercial Restricted (County) and “RS-3” Residential Single Family (County) to "CCC" Community Center Core (City) generally located north of Lake Lizzie Drive, southeast of Nova Road, and west of Druliner Road, providing for entering the designation on the official Zoning Map, filing of the Planning Commission recommendation and proof of publication, severability, and effective date. (Above is full title) **ACTION ON ORDINANCE NO. 2025-76** (This is a Quasi-Judicial proceeding)

9) **FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-78**, an ordinance of the City Council of the City of St. Cloud, Florida, amending Division 27 - Entertainment District, Section 3.13.3, C.2. - outside drinking limit; G - Hours for music and entertainment, and H - Games, sporting events, and entertainment and repealing sections 3.13.3.C(5)- Permit required; (D) Entertainment District event permit; and (E) Police Protection; (F) Fire Protection and emergency medical services and providing for severability, conflicts, codification, and an effective date. (Above is full title) **ACTION ON ORDINANCE NO. 2025-78**

10) **FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-79,** an ordinance of the City Council of the City of St. Cloud, Florida, amending Chapter 3, “Performance and Siting Standards” of the Land Development Code, by amending Articles 2 through 16, identified as Employment Commercial LDC Update, Project # CDA25-00004, providing for severability, scrivener’s errors, conflict, administrative correction, codification, publication, and an effective date. (Above is full title) **ACTION ON ORDINANCE NO. 2025-79**

11) **FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-80,** an ordinance of

the City Council of the City of St. Cloud, Florida, providing for the Zoning Amendment of the Zoning Map of the Land Development Code of the City of St. Cloud, Florida, specifically changing the zoning designation of approximately +/- 327.4 acres identified as NeoCity South, Project #ZMA25-00016, from “A” Agriculture to “EC” Employment Commercial, generally located north of Clay Whaley Road, east of C31 Saint Cloud Canal, south of Cross Prairie Parkway and west of Florida’s Turnpike, providing for amending the official Zoning Map, filing of the Planning Commission recommendation and proof of publication, applicability and effect, severability, copies on file and effective date. (Above is full title) **ACTION ON ORDINANCE NO. 2025-80** (This is a Quasi-Judicial proceeding)

12) **PUBLIC HEARING FOR RESOLUTION NO. 2025-139R**, a resolution of the City Council of the City of St. Cloud, Florida, granting a Conditional Use for a "Church" in the "I-1 " Industrial Zoning District on the +/- 1.47 acres of land known as DMI Business Park, Project #CNU25-00005, located at 400 DMI Court, as described in the body of this resolution. (Above is full title) **ACTION ON RESOLUTION NO. 2025-139R**

13) **FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-55,** an ordinance of the City Council of the City of St. Cloud, Florida, providing for the Zoning Amendment of the Zoning Map of the Land Development Code of the City of St. Cloud, Florida, specifically changing the zoning designation of approximately +/- 24.317 acres identified as Stephanie Leigh Rothstein Memorial Park Rezoning, Project #ZMA25-00008, from "A" Agriculture to "OR" Open Space/Recreation located at 2701 Missouri Avenue, providing for entering the designation on the official Zoning Map, filing of the Planning Commission recommendation and proof of publication, severability, and effective date.(Above is full title) **ACTION ON ORDINANCE NO. 2025-55** (This is a Quasi-Judicial proceeding)

14) **FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-56**, an ordinance of the City Council of the City of St. Cloud, Florida, providing for the Zoning Amendment of the Zoning Map of the Land Development Code of the City of St. Cloud, Florida, specifically changing the zoning designation of approximately +/- 0.118 acres identified as Rummell Road Rezoning, Project #ZMA25-00009, from "R-1A" Single Family Dwelling to "OR" Open Space/Recreation generally located on the southeast corner of Rummell Road and Eastern Avenue, providing for entering the designation on the official Zoning Map, filing of the Planning Commission recommendation and proof of publication, severability, and effective date. (Above is full title) **ACTION ON ORDINANCE NO. 2025-56** (This is a Quasi-Judicial proceeding)

15) **FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-57**, an ordinance of the City Council of the City of St. Cloud, Florida, providing for the Zoning Amendment of the Zoning Map of the Land Development Code of the City of St. Cloud, Florida, specifically changing the zoning designation of approximately +/- 0.97 acres identified as Cannery Park Rezoning, Project #ZMA25-00010, from "R-

2" Single & Two-Family Dwelling to "OR" Open Space/Recreation located at 901 Virginia Avenue, providing for entering the designation on the official Zoning Map, filing of the Planning Commission recommendation and proof of publication, severability, and effective date. (Above is full title) **ACTION ON ORDINANCE NO. 2025-57** (This is a Quasi-Judicial proceeding)

X. Council Action

1) Resolution 2025-130R, a resolution of the City Council of the City of St. Cloud, Florida amending the Special Event Fee Schedule for events held on City-regulated property in the City of St Cloud.

2) Resolution No. 2025-166R, a resolution of the City Council of the City of St. Cloud, Florida, authorizing the purchase of one (1) 25 Courageous Fire Boat, with options available through GSA Contract No. GS-07-0362T, and the award thereof to Gravois Aluminum Boats, LLC, dba Metal Shark, and providing an effective date.

3) Request City Council's approval of a Preliminary Subdivision Plan for Harvest Grove (f.k.a. Nona Townhomes), PSP25-00002.

4) Discussion and possible action regarding the review and determination on the applicant's appeal request for Project # COA24-00022, Historic Preservation Board approval with conditions, located at 1122 New York Avenue.

XI. First Readings and Introduction

The next items on the agenda are Ordinances before the Council for First Reading and Introduction for the sole purpose of the Council to authorize the publication of the ordinance for a final hearing. The Council will not take final action on the item tonight. Full presentations and public input on the ordinances will occur at the Final Hearing at which the Council will consider final action.

XII. City Attorney

XIII. City Manager

XIV. Mayor and Council Members

XV. Information Section and Report Section

- Thursday, November 20, 2025 – City Council Special meeting – 3:00 p.m. @ St. Cloud Community Center

  Thursday, November 20, 2025 – City Council Workshop – 3:00 p.m. or immediately following the Special meeting @ St. Cloud Community Center

  Thursday and Friday, November 27th and 28th, 2025 – City offices closed in observance of the Thanksgiving Holiday

Thursday, December 4, 2025 – Community Redevelopment Agency meeting – 3:00 p.m. @ St. Cloud Community Center

Friday, December 5, 2025 – Tree Lighting Celebration – 6:00 p.m. @ City Hall

Saturday, December 6, 2025 – Christmas Parade – 10:00 a.m. @ Downtown St. Cloud

Saturday and Sunday December 6th and 7th, 2025 – St. Cloud Holiday Festival @ Downtown St. Cloud

Thursday, December 11, 2025 – City Council meeting – 6:30 p.m. @ St. Cloud Community Center

Friday, December 12, 2025 – Employee Holiday Luncheon – City offices will be closed from 12:00 p.m. to 2:00 p.m.

Reports:
Warrant List # 1 FY 26

- FY 24-25 Fourth Quarter Budget Report

XVI. Adjournment

If a person decides to appeal any decision made by the board, agency, or commission with respect to any matter considered at such meeting or hearing, such person will need a record of the proceedings and that, for such purpose, such person may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based, and which record is not provided by the City of St. Cloud. (FS 286.0105) In accordance with the Americans With Disabilities Act, persons needing assistance to participate in any of these proceedings should contact the Secretary/Clerk of the Committee/Board (listed below), with a written request at least 48 hours prior to the meeting. (FS 286.26) City Clerk Ivy Llauro, 1300 9th Street, St. Cloud, FL. Phone 407-957-7300

Meeting: November 13, 2025

Agenda Item Type: Presentations Employee of the Month to Oakley R. Gray

Human Resources Agenda Item:
Presentation of Employee of the Month for the Month of November to Oakley R. Gray

Strategic Key Focus Areas:
High-Performing Government

Background Information:
Rose Testerman will be presenting Employee of the Month for the Month of November to Oakley R. Gray.

Legal Authority:
City of St Cloud Code Section 32-3

Budget and Recommendation:
Recommend approval for this item

No costs associated with this item

Finance Director's Comments:
N/A

Procurement Director's Comments:
N/A

City Manager's Comments:
City Manager recommends approval

City Council Action:
Final Action 11/13/2025

Attachments:
None

Meeting: November 13, 2025

Agenda Item Type: Consent Agenda
Resolution No. 2025-160R - St. Cloud Main Street Funding Agreement

City Manager Agenda Item:
Resolution No. 2025-160R, a resolution of the City Council of the City of St. Cloud, Florida, approving an agreement between the City of St. Cloud and St. Cloud Main Street, Inc. for funding a contribution in support of the St. Cloud Main Street program in an amount not to exceed seventy thousand dollars ($70,000) annually subject to annual appropriation by the City Council; authorizing the Mayor to execute the agreement and providing for an effective date.
COST: up to $70,000.00
This is item to approve execution of the agreement between the City and St. Cloud Main Street, Inc. in the amount of $70,000 for professional services.

Strategic Key Focus Areas:
Diverse Innovative and Magnetic Economic Development

Background Information:
St. Cloud Main Street is a program designed to promote a business development area within the City of St. Cloud ; and the City Council has determined that entering into this Agreement is in the best interest of the City of St. Cloud and will assist the St. Cloud Main Street in accomplishing their mission. This Agreement shall be for a period of sixty (60) months beginning October 1, 2025. All funds provided by the city shall be obligated within twelve (12) months of award for expenditure by St. Cloud Main Street. On an annual basis and no later then the date at which the City Council adopts city's annual budget, St. Cloud Main Street shall provide the following to the city:
a) an in-person presentation to the St. Cloud City Council including, as a minimum, a value statement certifying the services provided hereunder on behalf of the city for the twelve (12) months immediately prior to the presentation; and
b) a work plan for services to be provided by St. Cloud Main Street for the city's upcoming fiscal year.

Legal Authority:
City of St. Cloud Code of Ordinances Section 2.01 and Section 2.04

Budget and Recommendation:
The City agrees to provide an amount not to exceed $70,000.
Staff recommends **APPROVAL** of this request.

Finance Director's Comments:
Finance Director recommends **APPROVAL** of this item.

Procurement Director's Comments:

City Manager's Comments:
City Manager recommends approval

City Council Action:
Final Action 11/13/2025

Attachments:
1. Main Street 100925 clean final version.DOCX (Attach_1) RE Mainstreet
2. Main street funding agreement 2025 Res_
3. 20251028_141225 agreement
4. Design work plan 2025-26
5. Promo 2025-26
6. Organizatio 2025-2026
7. Exec. 25-26
8. ER 2025-26 Work Plan (002)

AGREEMENT FOR SERVICES

THIS AGREEMENT is by and between THE CITY OF ST. CLOUD, a Florida Municipal Corporation, hereinafter referred to as "CITY" and ST. CLOUD MAIN STREET, INC., a non-profit Florida Corporation, herein referred to as "Main Street".

WITNESSETH:

WHEREAS, the purposes of the Main Street Program, which include revitalization, stabilization and economic development of downtown St. Cloud are viable, legitimate public interests; and

WHEREAS, the Main Street Program is a program designed to promote a business development area within the City of St. Cloud; and

WHEREAS, the CITY has determined that the services to be provided hereunder are of substantial benefit to the downtown area and can best be implemented by Main Street and its professional staff; and

WHEREAS, the St. Cloud City Council has determined that the entering into of this Agreement is in the best interest of the CITY.

NOW THEREFORE, in consideration of the mutual covenants and conditions contained herein, the parties hereto agree as follows:

1. This Agreement shall continue in force for a period of sixty (60) months beginning October 1, 2025.

2. The CITY shall have the right to appoint one Board member to the Board of Directors of Main Street.

3. All funds provided by the CITY shall be obligated within twelve (12) months of award for expenditure by Main Street. On an annual basis and no later than the date at which the City Council adopts CITY's annual budget , Main Street shall provide the following to the CITY:

a) an in-person presentation to the St. Cloud City Council including, as a minimum, a value statement certifying the services provided hereunder on behalf of the CITY for the twelve (12) months immediately prior to the presentation; and
b) a work plan for services to be provided by Main Street hereunder for the CITY's upcoming fiscal year.

4. The annual work plans may include, but not be limited to the following activities, as recommended in the National Main Street Four Point Approach:

a) to promote the historic preservation, protection, and use of CITY's traditional downtown area, including that area's commercial and civic enterprises and residences;
b) to participate in, aid and support, CITY and City of St. Cloud downtown programs, policies, projects, initiatives and marketing activities as may be established by the City or by the Main Street board of directors in accordance with the CITY Redevelopment Plan and as CITY deems appropriate; and
c) to aid, work with and participate in the activities of other organizations, individual and public and private entities located within the St. Cloud Main Street footprint and CITY's downtown area engaged in similar purposes.

5. In consideration of the services to be rendered by Main Street, the CITY shall pay to the Main Street the total amount of SEVENTY THOUSAND DOLLARS ($70,000). The annual amount hereunder shall be subject to and conditioned upon the annual appropriation of funds by the St. Cloud City Council. The above amount shall be paid by the CITY to Main Street on November 30th of each year hereunder.

6. a) In addition to the foregoing, and subject to an annual appropriation by the City Council as may be necessary, CITY shall provide further support or sponsorship to Main Street in the form of the waiver of applicable use or permit review fees for the following Main Street events:

1. Veterans Dinner
2. Special events in the downtown area as part of which CITY has agreed to participate as an event partner.

b) Additionally, annually Main Street agrees to perform at a minimum four (4) special events open to the public and as approved by CITY to occur within the St. Cloud Entertainment District or at the St. Cloud Lakefront such as Small Business Saturday, Historic Preservation Award Banquet, Halloween Maniacs and Witches, and Cloud Cash.. For these approved events, CITY will waive all associated costs including CITY staff costs for said events, excluding, unless otherwise agreed to by CITY in advance, necessary public safety personnel required for the event.

c) For any and all events not described above and at CITY facilities other than the St. Cloud Ranch, Main Street will pay the standard government usage rates for CITY facilities in the same amount as CITY internally charges or allocates to CITY departments using CITY facilities. Additionally, for these events, Main Street shall pay any and all additional costs incurred for personnel and other services that CITY incurs, including but not limited to, additional staff personnel costs, clean up, solid waste disposal, and public safety personnel. For purposes herein, additional costs are defined as costs incurred by the CITY to provide personnel and services for the event above and outside of the normal manned business hours for the facility. If the event occurs during normal manned business hours for the facility Main Street will only pay for any necessary personnel costs for set up and break down by city staff.

d) No term herein shall prohibit Main Street from requesting additional facility use fee or other discounts from the City Council for the use of any CITY facility open to general public.

7. Notice may be provided by e-mail or United States mail to:

Main Street: Paula Stark
903 Pennsylvania Avenue
St. Cloud, FL 34769
E-mail: paula@stcloudmainstreet.org

CITY: Veronica Miller
City Manager
City Hall
1300 9th St.
St. Cloud, FL 34769

8. PUBLIC RECORDS:

Main Street understands that by virtue of this Agreement all of its documents, records and materials of any kind, relating to the relationship created hereby, shall be open to the public for inspection in accordance with Florida law. If Main Street will act on behalf of the CITY, as provided under section 119.011(2), Florida Statutes, Main Street, subject to the terms of section 287.058(1)(c), Florida Statutes, and any other applicable legal and equitable remedies, shall:

a) Keep and maintain public records required to perform the services hereunder.
b) Upon request from the CITY's custodian of public records, provide the CITY with a copy of the requested records or allow the records to be inspected or copied.
c). Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the contractor does not transfer the records to the CITY.
d) Upon expiration or termination of the contract, transfer, at no cost, to the CITY all public records in possession of Main Street or keep and maintain public records. If Main Street transfers all public records to the CITY upon completion of the expiration or termination of this Agreement, Main Street shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If Main Street keeps and maintains public records upon expiration or termination of the contract, Main Street shall meet all applicable requirements for retaining public records.
e) If Main Street does not comply with a public records request, said failure shall be deemed a breach or default of this Agreement and CITY shall have the right to exercise any remedy available to it under this Agreement or at law.

9. This Agreement shall terminated as of September 30 of each year hereunder in the event that the CITY fails to appropriate funding in its annual budget. In addition, the Agreement may be terminated at any time by either party with or without cause upon thirty (30) days written notice to the other party. If terminated by Main Street without cause any funds not previously obligated shall be returned to the CITY.

10. This Agreement may not be modified or amended except by an Agreement in writing signed by all parties.

11. This Agreement including the documents incorporated by reference contains the entire understanding of the parties hereto and supersedes all prior and contemporaneous agreements between the parties with respect to the performance of services by Main Street.

12. This Agreement is personal to the parties hereto and may not be assigned by Main Street, in whole or in part, without the prior written consent of CITY.

13. The parties agree that the sole and exclusive venue for any cause of action arising out of this Agreement shall be Osceola County, Florida.

14. This Agreement and any amendments hereto are executed and delivered in the State of Florida and shall be governed, interpreted, construed and enforced in accordance with the laws of the State of Florida.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year set forth below.

City of St. Cloud	**St. Cloud Main Street, Inc.**
By: _____	**By: _____**
Christian B. Robertson, Mayor	**Mel Welch, President**
Date: _____	**Date: _____**
Attest:	**Attest:**
_____	**_____**
Ivy Llauro, City Clerk	**Rick Heuser, Secretary**

RESOLUTION NUMBER NO.: 2025– 160R

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, APPROVING AN AGREEMENT BETWEEN THE CITY OF ST. CLOUD AND ST. CLOUD MAIN STREET, INC. FOR FUNDING A CONTRIBUTION IN SUPPORT OF THE ST. CLOUD MAIN STREET PROGRAM IN AN AMOUNT NOT TO EXCEED SEVENTY THOUSAND DOLLARS ($70,000) ANNUALLY SUBJECT TO ANNUAL APPROPRIATION BY THE CITY COUNCIL; AUTHORIZING THE MAYOR TO EXECUTE THE AGREEMENT AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the St. Cloud Main Street, Inc.'s Main Street Program is a program designed to promote a business development area within the City of St. Cloud; and

WHEREAS, the CITY has determined that the services to be provided as part of the program are of substantial benefit to the downtown area and can best be implemented by Main Street and its professional staff; and

NOW THEREFORE BE IT RESOLVED by the City Council of the City of St. Cloud, Florida, as follows:

SECTION I. The City Council of the City of St. Cloud, Florida, hereby approves funding of SEVENTY THOUSAND DOLLARS ($70,000) for the implementation of the Main Street program by St. Cloud Main Street, Inc. as more particularly described in the Agreement attached hereto and incorporated herein as Exhibit "A".

SECTION II. The Mayor is authorized and directed to execute the Agreement as set forth in Exhibit "A" and the City Manager is authorized to take any and all action necessary and consistent with this Resolution. The City Manager is further specifically authorized to withhold the formal written agreement and completion of the transaction upon her determination of any matter or factor, hereafter coming to her attention which may indicate such action is not in the City's best interest, provided that upon such withholding, the City Manager, with reasonable dispatch, shall present the issue to the City council, in session, for review and direction.

SECTION III. This resolution shall take effect immediately upon its adoption.

PASSED AND ADOPTED by the City Council of the City of St. Cloud, Florida, on this ____ day of October 2025.

CITY OF ST. CLOUD

_____
Christian B. Robertson, Mayor

ATTEST:

_____
Ivy Llauro, City Clerk

Approved as to form and legal if adopted,
deBeaubien, Simmons, Knight, Mantzaris & Neal, LLP

_____
Daniel F. Mantzaris, City Attorney

AGREEMENT FOR SERVICES

THIS AGREEMENT is by and between THE CITY OF ST. CLOUD, a Florida Municipal Corporation, hereinafter referred to as "CITY" and ST. CLOUD MAIN STREET, INC., a non-profit Florida Corporation, herein referred to as "Main Street".

WITNESSETH:

WHEREAS, the purposes of the Main Street Program, which include revitalization, stabilization and economic development of downtown St. Cloud are viable, legitimate public interests; and

WHEREAS, the Main Street Program is a program designed to promote a business development area within the City of St. Cloud; and

WHEREAS, the CITY has determined that the services to be provided hereunder are of substantial benefit to the downtown area and can best be implemented by Main Street and its professional staff; and

WHEREAS, the St. Cloud City Council has determined that the entering into of this Agreement is in the best interest of the CITY.

NOW THEREFORE, in consideration of the mutual covenants and conditions contained herein, the parties hereto agree as follows:

1. This Agreement shall continue in force for a period of sixty (60) months beginning October 1, 2025.

2. The CITY shall have the right to appoint one Board member to the Board of Directors of Main Street.

3. All funds provided by the CITY shall be obligated within twelve (12) months of award for expenditure by Main Street. On an annual basis and no later than the date at which the City Council adopts CITY's annual budget ~~July 31 of each year~~, Main Street shall provide the following to the CITY:

a) an in-person presentation to the St. Cloud City Council including, as a minimum, a value statement certifying the services provided hereunder on behalf of the CITY for the twelve (12) months immediately prior to the presentation; and
b~~d~~) a work plan for services to be provided by Main Street hereunder for the CITY's upcoming fiscal year.

4. The annual work plans may include, but not be limited to the following activities, as recommended in the National Main Street Four Point Approach:

a) to promote the historic preservation, protection, and use of CITY's traditional downtown area, including that area's commercial and civic enterprises and residences;
b) to participate in, aid and support, CITY and City of St. Cloud downtown programs, policies, projects, initiatives and marketing activities as may be established by the City or by the Main Street board of directors in accordance with the CITY Redevelopment Plan and as CITY deems appropriate; and
c) to aid, work with and participate in the activities of other organizations, individual and public and private entities located within the St. Cloud Main Street footprint and CITY's downtown area ~~overlapping Central CITY District~~ engaged in similar purposes.

5. In consideration of the services to be rendered by Main Street, the CITY shall pay to the Main Street the total amount of SEVENTY THOUSAND DOLLARS ($70,000). The annual amount hereunder shall be subject to and conditioned upon the annual appropriation of funds by the St. Cloud City Council. The above amount shall be paid by the CITY to Main Street on November 30th of each year hereunder.

6. a) In addition to the foregoing, and subject to an annual appropriation by the City Council as may be necessary, CITY shall provide further support or sponsorship to Main Street in the form of the waiver of applicable use or permit review fees for the following Main Street events:

1. Veterans Dinner
2. Special events in the downtown area as part of which CITY has agreed to participate as an event partner.

b) Additionally, annually Main Street agrees to perform at a minimum four (4) ~~one~~ special events ~~per quarter~~ open to the public and as approved by CITY to occur within the St. Cloud Entertainment District or at the St. Cloud Lakefront such as Small Business Saturday, Historic Preservation Award Banquet, Halloween Maniacs and Witches, and Cloud Cash.. For these approved events, CITY will waive all associated costs including CITY staff costs for said events, excluding, unless otherwise agreed to by CITY in advance, necessary public safety personnel required for the event.

c) For any and all events not described above and at CITY facilities other than the St. Cloud Ranch, Main Street will pay the standard government usage rates for CITY facilities in the same amount as CITY internally charges or allocates to CITY departments using CITY facilities. Additionally, for these events, Main Street shall pay any and all additional costs incurred for personnel and other services that CITY incurs, including but not limited to, additional staff personnel costs, clean up, solid waste disposal, and public safety personnel. For purposes herein, additional costs are defined as costs incurred by the CITY to provide personnel and services for the event above and outside of the normal manned business hours for the facility. If the event occurs during normal manned business hours for the facility Main Street will only pay for any necessary personnel costs for set up and break down by city staff.

the right to exercise any remedy available to it under this Agreement or at law.

9. This Agreement shall terminated as of September 30 of each year hereunder in the event that the CITY fails to appropriate funding in its annual budget. In addition, the Agreement may be terminated at any time by either party with or without cause upon thirty (30) days written notice to the other party. If terminated by Main Street without cause any funds not previously obligated shall be returned to the CITY.

10. This Agreement may not be modified or amended except by an Agreement in writing signed by all parties.

11. This Agreement including the documents incorporated by reference contains the entire understanding of the parties hereto and supersedes all prior and contemporaneous agreements between the parties with respect to the performance of services by Main Street.

12. This Agreement is personal to the parties hereto and may not be assigned by Main Street, in whole or in part, without the prior written consent of CITY.

13. The parties agree that the sole and exclusive venue for any cause of action arising out of this Agreement shall be Osceola County, Florida.

14. This Agreement and any amendments hereto are executed and delivered in the State of Florida and shall be governed, interpreted, construed and enforced in accordance with the laws of the State of Florida.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year set forth below.

City of St. Cloud

By: _____
Christian B. Robertson, Mayor
Date: _____

Attest:

_____
Ivy Dela Cruz, City Clerk

St. Cloud Main Street, Inc.

By: Mel Welch
Mel Welch, President
Date: 10/20/2025

Attest:

W. R. Heuser
Rick Heuser, Secretary

ST. CLOUD MAIN STREET

Design Committee 2025-2026		**Objective : Continue to promote a sense of community pride with an opportunity for everyone participating and sharing in the revitalization of our hometown.**				
Activity:						
Task Necessary to Complete Activity:	**Task Responsibility:**	**Due Date:**	**Comp. Date:**	**Income:**	**Expense**	**Actual:**
Citrus labels & brand Trail	Committee/Staff	~~October~~	TBD			
Historic tours, Ghost Tours, Trolley	Committee/Staff	Oct-				
Sandhill/Amaryllis	Committee/Staff/city	ongoing				
Historic Markers- Goal 2 per year/comp. ea. Yr. Minimum of 1. -Power plant a consideration	Committee/staff				*2500	
Follow up on city signage, bike racks, Gateway parking garage, other city items as determined	Committee/staff					
New Mural/Oddfellows/Bl Squirrel	Committee	See grant dates				
Bathing Beauties restoration	Committee/Al	now		$750	$750	
Promotional: Ornaments		November				
Other:				**Net Profit/Loss:**		

ST. CLOUD MAIN STREET

St. Cloud Main Street Work Plan

Promotions: 2025-26		**Creating a Positive image of the business district to attract customers and investors and rekindle community pride.**				
Task Necessary to Complete Activity:	**Task Responsibility:**	**Due Date:**	**Comp. Date:**	**Income:**	**Expense:**	**Actual:**
Redneck Gala **Veteran's Dinner**	Committee/staff	Now-Dec 1 Now-Oct 1	January 26 Nov.7	$28,550 $24900	5600 $1000	$22,950 $23,900
Halloween	Committee/staff	Now-Oct 1	Oct. 31	$6700	$6750	0
Small Business Saturday	Committee/staff	Now-Oct	Nov. 29	$5,000	$3700	$1,400
Holiday Decorating	Committee/city	Now/Nov 1	Dec. 17		$500 In kind awards	
Taste of Main Street	Committee/staff	Oct Jan	April 18	$5350	$350	5,000
-social media, Bugler, email blasts **-business outreach Website, press releases** **-graphics/Florida App** **- Distrx/Buy local**	In house	Now	Ongoing			
				Net Profit/Loss:		

ST. CLOUD MAIN STREET

St. Cloud Main Street Work Plan

Committee: Organization 2025-26		**Objective: is to continue to promote a sense of community pride with an opportunity for everyone participating and sharing in the revitalization of our hometown**				
Activity:						
Task Necessary to Complete Activity:	**Task Responsibility:**	**Due Date:**	**Comp. Date:**	**Income:**	**Expenses**	**Actual:**
Breakfast with the Pros-review topics And potential speakers to fit and establish budget for 2025-26 series	Committee/staff			$3800	0 Food/location/printing In kind	$3800
Annual Meeting-	Committee/staff	May	Aug.	$5,500 sponsors $1650 tickets	$2,400 food & supplies Awards, certificates In kind	4750
Membership Drive/Patron Plan -Membership: Management and recruitment	Committee/staff			$2400 (new)	0	$2400
Grants: committee to review grant example criteria and come up with additional plans						
State/District, Arts in Humanities, Corps	Staff/consultant	Now		186,000,000	186,000	0
Volunteer committee: Database, set additional projects: socials, awards, volunteer of the year	committee	ongoing				
Walking Tour Brochure(experience Kissimmee)Ad sales	Committee/staff			10,000	10,000	0
Project Attendance:				**Net Profit/Loss:**		

Organization Committee Work Plan

1. Breakfast with the Pros – Need to confirm speakers… Loading will be location
2. Annual Meeting – Where? Date? We need to decide no later than May. Award nominating committee – Patti
   Invitations, ballots and proxy no later than July 1st.
3. Membership – We need to campaign to the new businesses that have opened
4. Grants – need projects wish list and grant book with openings and deadlines to cross reference with our projects wish list.
5. Volunteer Committee – need to create plan to recruit more Volunteers and to update active listing.

ST. CLOUD MAIN STREET

St. Cloud Main Street Work Plan

Committee: Executive 2025-2026		**Objective: Operations of Organization**				
Activity:						
Task Necessary to Complete Activity:	**Task Responsibility:**	**Due Date:**	**Comp. Date:**	**Income:**	**Expense**	**Actual:**
Oversee Executive Director		ongoing				
-evaluation	President & Director	December-January				
Financials/Audit/Budget	Treasurer/director Approved by board	By October				
-audit	Accountants Director & treasurer follow up	11/1			$2000	
Community Outreach	Director and Executive w/board	ongoing				
Florida Main Street - State & Local awards	Director/President	March Conference July			$2,000	
Value Statement/presentation to city	Director/President/Treasurer	Late Spring/summer				
Board Education/retreat	Director/President	End/Beginning of fiscal year				
Committee & work plan oversite	Executive	ongoing				
25th Anniversary Projects				**$5000**	**$3240**	**$1740**
				Net Profit/Loss:		

ST. CLOUD MAIN STREET

St. Cloud Main Street Work Plan

Committee: Economic Restructuring 2025-2026		**Objective: is to continue to promote a sense of community pride with an opportunity for everyone participating and sharing in the revitalization of our hometown.**				
Activity:						
Task Necessary to Complete Activity:	**Task Responsibility:**	**Due Date:**	**Comp. Date:**	**Income:**	**Expense**	**Actual:**
Cloud Cash	Staff/committee	June1	July 31	$13,500 County grant	($13,500)	0
Historic Inventory Grant/New app due April to June	City/Staff	Now	June 2026	$50,000	($50,000)	0
Awards & Plaque Programs/Historic	Committee	Now	May 16th			
	Staff	Ongoing	In system			
Maintain relationship with CRA/Economic Development	Committee/staff		Ongoing			
	Staff/committee		August			
Transportation/Trolley/Pedicabs	Committee/Staff	Soon	ongoing		45,000-50,000	
Power Plant follow up	Committee/Staff		ongoing			
Downtown Living						
Historic updates- Training						
				Net Profit/Loss:		

Meeting: November 13, 2025

Agenda Item Type: Consent Agenda
Resolution No. 2025-161R - Rummell Road Roundabout TA

Procurement Agenda Item:
Resolution No. 2025-161R, a resolution of the City Council of the City of St. Cloud, Florida, authorizing the City Manager to enter into a task authorization to the contract and agreement for Continuing Professional Civil Engineering Services with Wright-Pierce, Inc. dated January 5, 2023 for Design Services for Rummell Road Roundabout, and any amendments thereto, and providing an effective date.
COST: up to $198,000.00
This item is to approve a task authorization with Wright-Pierce, Inc. for design services for Rummell Road Roundabout.

Strategic Key Focus Areas:
Reliable Transportation Network

Background Information:
Per Kevin Felblinger, Public Works Director, Lakeshore Boulevard and Rummell Road are important collector roadways in the City's transportation network. There is a heavily used trail along Lakeshore Boulevard and another trail planned for Rummell Road. The goal of the new roundabout intersection is to improve safety and traffic flow through this area.

Legal Authority:
Resolution No. 2022-265R approved on October 6, 2022.

Budget and Recommendation:
Budgeted $198,000.00/Actual Cost up to $198,000.00
ST2604, Capital Projects
300-9595-541-31-00
Staff recommends **APPROVAL** of this request.

Finance Director's Comments:
Finance Director recommends **APPROVAL** of this item.

Procurement Director's Comments:
Recommends approval

City Manager's Comments:
City Manager recommends approval

City Council Action:

11/13/2025 - Final Action

Attachments:
1. Resolution No. 2025-161R
2. Rummell_Roundabout_Proposal_20250822 (4)

RESOLUTION NO. 2025-161R

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, AUTHORIZING THE CITY MANAGER TO ENTER INTO A TASK AUTHORIZATION TO THE CONTRACT AND AGREEMENT FOR CONTINUING PROFESSIONAL CIVIL ENGINEERING SERVICES WITH WRIGHT-PIERCE, INC. DATED JANUARY 5, 2023 FOR DESIGN SERVICES FOR RUMMELL ROAD ROUNDABOUT, AND ANY AMENDMENTS THERETO, AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City has a contract and agreement for Continuing Professional Civil Engineering Services with Wright-Pierce, Inc., dated January 5, 2023, and

WHEREAS, the City is in need of civil engineering design services for Rummell Road Roundabout, and

WHEREAS, Wright-Pierce, Inc., has submitted a proposal for the tasks.

NOW THEREFORE, BE IT RESOLVED by the City Council of the City of St. Cloud, Florida, as follows:

SECTION I. The City Manager is authorized and is directed, where appropriate, to enter into a task authorization to that certain agreement dated January 5, 2023, as approved by the City Attorney, and any amendments thereto, between the City of St. Cloud and Wright-Pierce, Inc.

SECTION II. The City Manager is authorized and is directed, where appropriate, to issue a purchase order or "confirmation letter" to said provider.

SECTION III. The City Manager is specifically authorized to withhold the purchase order or "confirmation letter" upon determination of any matter or factor, hereafter coming to her attention which may indicate such action is not in the City's best interest, provided that upon such withholding, the City Manager, with reasonable dispatch, shall present the issue to the City Council, in session, for review and direction.

SECTION IV. This resolution shall take effect immediately upon its adoption.

PASSED AND ADOPTED by the City Council of the City of St. Cloud, Florida this 13th day of November 2025.

CITY OF ST. CLOUD

_____
Christian B. Robertson, Mayor

ATTEST:

_____
Ivy Llauro, City Clerk

LEGAL IN FORM AND VALID IF ADOPTED
deBeaubien, Simmons, Knight, Mantzaris, & Neal, LLP

_____
Daniel F. Mantzaris, City Attorney

WRIGHT-PIERCE
Engineering a Better Environment

601 South Lake Destiny Road, Suite 290
Maitland, FL 32751
407.906.1776 | wright-pierce.com

August 22, 2025

Kevin Felblinger, PE, CFM, CPM
Public Works Director
City of St. Cloud, Florida
3101 Progress Lane
St. Cloud, FL 34769

SUBJECT: Task Order Proposal for Design Services for Rummell Road Roundabout
City of St. Cloud, FL

Dear Mr. Felblinger:

Wright-Pierce would like to thank the City of St. Cloud (City) for the opportunity to submit this proposal to provide professional engineering services for the proposed Rummell Road roundabout.

Project Background/Understanding

The City desires to redesign the intersection of Rummell Road and Mississippi Avenue to replace the existing three-way "T-intersection" with a one-lane roundabout. To support the effort and provide sufficient land area the City has purchased two residential lots adjacent to the intersection consisting of 0 Mississippi Avenue and 4315 Rummell Road. The City's intention is to not demolish the existing house at 4315 Rummell Road, thus limiting the location and geometric approaches of the roundabout. This topic will need to be investigated and discussed during the design process to see if the structure's area may be needed for the proposed roundabout, stormwater management, or floodplain compensation. To mitigate the effects on this property and structure it is assumed that the intersection will be closed during construction activities and a temporary detour will be provided around the project site.

Preliminary research of the project site has shown that the following items will need to be considered during design:

- Coordination with the City to integrate Eastern Avenue into the design (one-way street)
- Coordination with the City to integrate Cypress Avenue into the design
- Maintaining access to Lift Station S016 owned/operated by Toho Water Authority (TWA)
- Coordination with the City for a temporary traffic detour route during construction
- Relocation and coordination of existing public and private utilities
- Clearing, grubbing, and demolition of obstructions
- Stormwater treatment and attenuation including BMP Trains calculations
- Stormwater management system permitting
- Floodplain impacts and possible compensation
- Landscaping for the roundabout

This project site is located within a FEMA Zone AE special flood hazard area with an elevation of 61 (NAVD 88) per FEMA FIRM Map number 12097C0095G. Impacts to floodplain storage volume are anticipated and as such floodplain compensation may be necessary. No FEMA floodplain permitting is anticipated as the project is not in a regulatory floodway.

Most of the project area appears to be uplands that have been previously disturbed, however, there are surface waters and fringe wetlands adjacent to the project area. We have provided a limited environmental scope consisting of a site visit to check for the presence or absence of gopher tortoise at the 0 Mississippi Avenue property and a windshield survey of the area.

Discharge of stormwater to adjacent City owned property may be part of the design (see Figure 1). There is a low, vegetated area located east of the project site that could be used as a discharge point. Permitting with SFWMD for a stormwater outfall will be required.

We anticipate some level of public involvement and have provided scope for attendance at a public information meeting, as requested by the City. This scope assumes no additional property acquisition assistance is required.

Figure 1 – SW Discharge



Scope of Services

Wright-Pierce proposes the following Scope of Services that further defines the Scope of Work, Schedule, and Compensation necessary to design this one-lane roundabout and other associated improvements.

Scope of Work

Task 1: Project Initiation, Data Collection, and Preliminary Investigations

Kickoff Meeting: A kick-off meeting will be held (via Teams) to discuss the project goals, information needs, and critical success factors. The objective of this meeting is to introduce the design team, meet key City staff, establish communication protocols, define data sources, and obtain copies of relevant City records such as studies, plans, land surveys, traffic counts, etc. Wright-Pierce will develop the agenda and meeting minutes for the meeting and distribute these to all meeting attendees via e-mail.

Right-of-Way and Topographic Survey: Field surveys will be required to support the design efforts. The project is located within several City rights-of-way and two adjacent lots the City has purchased for the project (addresses mentioned above). It will be necessary to conduct a right-of-way survey within this area to establish the limits of the proposed improvements and impacts to existing conditions such as trees, lawns, driveways, utilities, etc. This scope includes two (2) legal descriptions and sketches for easements as may be required for construction.

Survey will be based on North American Vertical Datum (NAVD) 1988 elevations. Horizontal locations will be to Florida State Plane Coordinates based in NAD83/Florida East Zone. Survey shall depict existing conditions such as the location of buildings, structures, fencing, above ground utility appurtenances, underground utilities marked by others (water, sewer electric, telephone, cable, natural gas, storm drains), roadways, trees (4-inch diameter or greater), curbs, water surfaces, wetland delineations, seasonal high-water marks, test borings made/marked, sidewalks, catch basins, manholes, signs, mailboxes and utility poles. Wright-Pierce will contract Johnston's Surveying, Inc. for these services.

Geotechnical Investigations: To ascertain subsurface conditions that will influence the design and construction, geotechnical investigations will be conducted consisting of four auger borings within the proposed roadway areas. Within the area for the stormwater ponds two auger borings will be conducted along with two Permeability Tests. A completed soils report will include soil classification, sieve analysis, seasonal high-water table and whether existing materials are suitable for backfill and pond construction. Wright-Pierce will contract Nadic Engineering Services, Inc. for these services.

Subsurface Utility Engineering (SUE): Under our subcontract with Johnston's Survey, SUE Investigations will be undertaken to determine the types and locations of underground utilities in the project area. The work will be performed by D & E Short, LLC d/b/a Subsurface Solutions ("Subsurface Solutions").

Subsurface Solutions shall examine and survey the above-referenced project area consisting of the roadway rights-of-way individual parcels using Ground Penetrating Radar (defined below), in accordance with ASCE Standard 38-02, Quality Level "B" and/or an Electro Magnetic Pipe Locator. Subsurface Solutions shall also provide a rough drawing of the items located using Ground Penetrating Radar and/or an Electro Magnetic Pipe Locator overlaid on a satellite image of the Property. Subsurface Solutions will contact the City, Sunshine 811, and other known utility owners and request copies of their utility plans. These records will be represented in our subsequent base mapping.

Environmental Services: Wright-Pierce will contract with Environmental Sciences Associates (ESA) for the following services:

1. Desktop Review: A desktop review will be conducted of the site to determine any potential constraints that may currently exist. This includes, but not limited to, National Wetlands Inventory (NWI), National Resource Conservation Service (NRCS) Soils, and United States Geographical Survey Topographic databases. Listed species databases will be reviewed as well including the Audubon Florida EagleWatch Bald Eagle Nest Locator and the U.S. Fish and Wildlife Service (FWS) Wood Stork Nesting Colonies and Core Foraging Areas.
2. Preliminary Listed Species Survey: The site review will include a 15% gopher tortoise (*Gopherus polyphemus*) burrow survey within and up to 25-feet of the Review Area.

SFWMD ERP Preapplication Meeting: Wright-Pierce will set up and lead a virtual preapplication meeting with SFWMD to discuss permitting requirements and needs regarding stormwater, floodplains, and other environmental issues (via Teams).

Task 1 Deliverables

The following documents will be provided as PDFs and transmitted to the City via email:

- Kickoff Meeting Agenda and Meeting Minutes.
- Geotechnical Data Report and Geotechnical Design Memorandum.
- Right-of-way and Topographic Survey.
- Environmental Considerations Report.
- ERP Preapplication Meeting Agenda and Meeting Minutes

Task 2: Conceptual Design

Following receipt of the right-of-way and topographic survey Wright-Pierce will develop a Conceptual Design for the project. This will include a plan view layout for the roundabout at the intersection of Rummell Road and Mississippi Avenue with associated connections of Cypress Avenue and Eastern Avenue and typical sections of the roadways. The plan will also include conceptual locations for stormwater management systems. The typical sections and horizontal design layouts will be submitted to the City for their review and approval. After attendance with the City at the Design Review Meeting (DRM), Wright-Pierce will incorporate mutually agreed upon comments and develop figures for a public meeting. Wright-Pierce will prepare for and attend a public meeting to review the project goals and design.

Task 2 Deliverables

The following documents will be provided as PDFs and transmitted to the City via email:

- Typical Sections and Conceptual Design Plan.
- Attendance (via Teams) at the DRM.
- Disposition of Conceptual Design comments.
- Attendance (in person) of one Wright-Pierce employee at a public meeting.

Task 3: 60% Design

Following City approval of Conceptual Design Wright-Pierce will incorporate mutually agreed upon comments and develop 60% design plans for the project. This will include design of the one-lane roundabout and associated stormwater management systems. **Table 1** indicates the expected drawings for the 60% submittal and subsequent submittals.

Table 1 Anticipated Drawings

Drawing Name	No. of Sheets	Included in 60% Design Phase	Included in 100% and Final Phase
Title Sheet and Index	1	X	X
General Notes	1	X	X
Abbreviations and Legends	1	X	X
Project Layout and Key Map	1	X	X
Clearing, Grubbing, and Demolition Plan	3	X	X

Roadway Typical Sections	3	X	X
Roadway Plan & Profiles	5	X	X
Intersection Details	1	X	X
Cross Sections	3	X	X
Stormwater Management Details	2	X	X
Construction Details	4	X	X
Floodplain Compensation Plans	2	X	X
Sediment and Erosion Control Plans	4	X	X
Signing and Pavement Marking Plans	3		X
Temporary Traffic Control Plans	3		X
Utility Adjustment Plans	3	X	X
Landscape and Irrigation Plans	3	X	X

a) Wright-Pierce will prepare a 60% Opinion of Probable Construction Cost based on FDOT 6-month average unit pricing.
b) A 60% design package consisting of the aforementioned plan sheets will be submitted to the City for review. A Design Review Meeting (DRM) will then be held virtually with the City to review comments.
c) The project area is located within the East Tohopekaliga drainage basin which is presently an impaired water body. The project will need to provide reductions in post-development nutrient loading for total phosphorus (TP) and total nitrogen (TN).
d) This task includes preliminary design of potential relocation of water and sewer mains within the project area. This scope assumes water and sewer relocations would be installed with conventional trenching methods and does not include any jack and bore, directional bore or other trenchless methods. This scope does not include any hydraulic analysis or modeling and assumes the same size mains will be used. This scope assumes approximately 300 feet of water and sewer relocation may be needed.
e) Design of relocation for electric, telecommunications and gas utilities will be performed by the utility provider.

Task 3 Deliverables

The following documents will be provided as PDFs and transmitted to the City via email:

- 60% Design Plans.
- 60% Opinion of Probable Construction Cost.
- Attendance (via Teams) at the DRM.
- Disposition of 60% Design comments.
- Draft Stormwater Drainage Report

Task 4: Utility Coordination

In parallel with the 60% Design, Wright-Pierce will coordinate with utility providers within the project area. As needed, we will communicate and meet with the utility providers to ensure that they relocate their facilities in a timely manner. Note that we cannot control the timeliness of utility relocations by others. Utility adjustments (e.g., upsizing, moving, and relocating existing utilities) are not included in this Scope of Work and will be performed directly by the utility provider. All utility relocation design, permitting and construction costs are assumed to be the responsibility of the utility provider.

Task 4 Deliverables

The following documents will be provided and transmitted to the City via email:

- Emailed communications with utility providers.

Task 5: Permitting

This task is being provided as hourly not-to-exceed due to the uncertainty with both SFWMD permitting and the need for a cultural resource assessment survey. At this time the type of permit that will be required by SFWMD is not clear, the project is assumed to qualify for an exemption or a general permit.

a) SFWMD Environmental Resource Permit: Upon City concurrence with the 60% Design Phase documents, Wright-Pierce will complete and submit an ERP application for the proposed improvements. We anticipate responding to up to two (2) rounds of reasonable Requests for Additional Information (RAIs) from the agency during the permitting review process. Responding to RAI's beyond what is normal and customary and responding to permitting issues beyond our control (which cannot currently be anticipated) is excluded from this Scope of Services.

   This Scope of Services assumes no wetland impacts will be required for the project or associated stormwater outfall that is part of the ERP application. We further assume that a General Permit (GP) application will be used for permitting the stormwater management system.

b) Toho Water Authority (TWA): This task includes submittal to TWA for Construction Plan Review and review of the FDEP permit applications. The plans developed during the 60% Design task will be submitted for review. This task includes a pre-application meeting with TWA (via Teams).

c) FDEP Water and Sewer Permitting: This task includes preparation and submittal of the permit application forms for FDEP water and wastewater permitting related to relocation of water and sewer mains.

Task 5 Deliverables

- Completed ERP application forms and supporting documents via email for City review.
- ERP and FDEP and Toho signature pages to the City via email for execution.
- Response to two (2) RAIs.

Task 6: 100% and Final Design

a) Upon permit approval Wright-Pierce will advance the 60% Design to 100% Design. The goal of the 100% Design is to be essentially complete but allow the City a final opportunity for review and comment. The 100% Design will be submitted to the City for their review and a DRM will then be held with the City to review comments. Final signed and sealed documents will then be submitted to the City.
b) Prepare draft Division 0 and Division 1 contract documents using Engineers Joint Contract Documents Committee (EJCDC) standard forms.
c) Prepare Division 2 technical specifications, and FDOT Reference Specifications.

Task 6 Deliverables

The following documents will be provided as PDFs and transmitted to the City via email:

- 100% Design Plans.
- 100% Opinion of Probable Construction Costs.
- 100% Draft Specifications.
- Attendance (via Teams) at the 100% DRM.
- Disposition of 100% design comments.
- Final Plans, PDF digitally signed and sealed.
- Final Contract Documents.
- Final Opinion of Probable Construction Costs.
- Final Specifications.

Task 7: Bidding and Construction Phase Services

Wright-Pierce will assist the City by performing the following bid-phase services:

a) Attendance (via Teams) at a pre-bid meeting. Meeting minutes will be prepared by others.
b) Respond to City on bidder questions and necessary Addendums. City to respond to bidders.
c) Attendance (via Teams) at a bid opening meeting. Meeting minutes will be prepared by others.

Wright-Pierce will assist the City by performing the following services during construction:

a) Prepare for and attend (via Teams) a pre-construction meeting with the City and the Contractor. Meeting minutes will be prepared by others.
b) Review up to 8 submittal/shop drawing reviews.
c) Respond to 4 requests for information (RFIs).
d) Attend progress meeting virtually (4 meetings). Meeting minutes will be prepared by others.
e) Attend substantial completion and final completion walkthrough, including providing punch-list items to the City.
f) Review and approve the As-Built Drawings, submitted by the Contractor, for compliance with the City As-Built requirements.
g) Submit permit closeout documents to SFWMD, Toho and FDEP.

Task 7 Deliverables

The following documents will be provided as PDFs and transmitted to the City via email:

- Completed ERP permit closeout documents via email for City review.
- Electronic upload of ERP permit closeout documents to SFWMD website.
- Copies of all construction files.

Compensation

Wright-Pierce will complete the above Scope of Services for tasks 1, 2, 3 and 6 for the lump sum fees shown in Table 2 below. Tasks 4,5 and 7 will be performed on an hourly not-to-exceed basis based on the hourly rates in our then current General Services Contract. Fees will be invoiced monthly in accordance with our General Services Contract based on our estimate of completion for each task.

Table 2 Fee Breakdown by Task

Scope Item	Fee Type	Fee
Task 1 – Project Initiation, Data Collection, and Preliminary Investigations	Lump Sum	$ 40,000
Task 2 – Conceptual Design	Lump Sum	$ 18,000
Task 3 – 60% Design	Lump Sum	$ 59,000
Task 4 – Utility Coordination	Hourly NTE	$ 4,000
Task 5 – Permitting	Hourly NTE	$ 11,000
Task 6 – 100% and Final Design	Lump Sum	$ 48,000
Task 7 – Bidding and Construction Phase Services	Hourly NTE	$ 18,000
Total Fee		**$198,000**

Schedule

We will start our services within 14 days after the City's acceptance of this proposal and issuance of a Purchase Order (PO)/Notice to Proceed (NTP). Permitting timeframes are subject to agency and City review timelines.

Clarifications and Exclusions

The following services are not included in the Scope of Services for the Project:

a) The City will pay for all permit fees and associated review fees related to the project.
b) The City will issue bid documents to bidders, track bidders, and issue addendums.
c) Additional survey may be required after the completion of Task 2 related to City comments.
d) Negotiations for properties or easements.
e) Traffic impact, origin and destination, or other traffic studies (including counts).
f) Traffic signal design.

g) Street lighting design. (Required for Roundabouts in accordance with FDOT Design Manual – assumed to be performed by others or not required by the City).
h) Endangered species, or habitat mitigation services. Gopher tortoise permitting and relocation to be performed by the contractor.
i) Bonneted bat surveys.
j) Archeological or Cultural Resources Assessment Surveys
k) Wetland delineation and permitting.
l) Meetings beyond those described in scope.
m) Costs for additional research or excavations deemed necessary to evaluate National Register of Historic Places (National Register) eligibility, Section 106 Determination of Effects for National Register–eligible resources, Section 106 consultation, or the development of a Memorandum of Agreement (MOA) are not included in this scope.
n) Hazardous materials (asbestos, metals, and polychlorinated biphenyls) investigation, testing, analysis, and abatement design.
o) Coordinating historical preservation.
p) The project area is assumed to be free of soil and groundwater contamination.
q) This proposal does not include full or part-time construction inspection, it's assumed City Inspection Staff will provide this.

If this proposal is acceptable, please provide an NTP and PO and we will work toward scheduling the initial kick-off meeting. We appreciate the opportunity to present this proposal and look forward to working with you and your staff. If you have any questions or require additional information, please do not hesitate to contact me at 207-319-1528 or at the e-mail address listed below.

Sincerely,
WRIGHT-PIERCE

Lucas S. Anthony, PE
Project Manager
lucas.anthony@wright-pierce.com

Ryan T. Wingard, PE
Vice President
ryan.wingard@wright-pierce.com

Meeting: November 13, 2025

Agenda Item Type: Consent Agenda
Resolution No. 2025-162R - FY 2025-2026 Paving

Procurement Agenda Item:
Resolution No. 2025-162R, a resolution of the City Council of the City of St. Cloud, Florida, authorizing the City Manager to enter into a task authorization to the contract and agreement for Alternative Paving Methods with American Persian Engineering & Construction, LLC, dba APEC, LLC dated February 16, 2022, and any amendments thereto, for asphalt paving in the Southern Pines and Esprit neighborhoods and others, and providing an effective date.
COST: up to $1,584,000.00
This item is to approve a task authorization with American Persian Engineering & Construction, LLC, dba APEC, LLC for Asphalt Paving in the Southern Pines and Esprit neighborhoods and others.

Strategic Key Focus Areas:
High-Performing Government

Background Information:
Per Kevin Felblinger, Public Works Director, this project is the FY2026 Annual Asphalt Paving project. The proposed roadway work includes roads in the Southern Pines neighborhood, the Esprit neighborhood, and others. The roads were chosen based on their pavement condition index score. American Persian Engineering & Construction has provided a quote for this work based on their existing contract with the City. Their proposed work includes milling, paving, striping, and maintenance of traffic. The City of St. Cloud completed a Pavement Condition Index Survey at the end of 2024. This survey provided a condition score for every road that the City maintains. The scope of work was developed based on the condition index and the intent is to repair the roads with the worst conditions. With this paving, the City's average pavement condition index will improve.

Legal Authority:
Resolution No. 2022-027R approved on February 10, 2022.

Budget and Recommendation:
Budgeted $1,600,000.00/Actual Cost up to $1,584,000.00
ST2601
Gas Tax Fund
300-9595-541-34-00
$1,053,250.00
ST2602
Franchise Fees
$530,750.00
Staff recommends **APPROVAL** of this request.

Finance Director's Comments:
Finance Director recommends **APPROVAL** of this item.

Procurement Director's Comments:
Recommends approval

City Manager's Comments:
City Manager recommends approval

City Council Action:
11/13/2025 - Final Action

Attachments:
1. Resolution No. 2025-162R
2. 1 Proposal Asphalt 9 Streets for 2026
3. 2 Paving_FY26_-_Financial_Breakdown
4. 3 Paving_FY26_-_Pavement_Condition_Index (1)
5. 4 Paving_FY26_Map_1
6. 5 Paving_FY26_Map_2
7. 6 Paving_FY26_Map_3

RESOLUTION NO. 2025-162R

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, AUTHORIZING THE CITY MANAGER TO ENTER INTO A TASK AUTHORIZATION TO THE CONTRACT AND AGREEMENT FOR ALTERNATIVE PAVING METHODS WITH AMERICAN PERSIAN ENGINEERING & CONSTRUCTION, LLC, DBA APEC, LLC DATED FEBRUARY 16, 2022, AND ANY AMENDMENTS THERETO, FOR ASPHALT PAVING IN THE SOUTHERN PINES AND ESPRIT NEIGHBORHOODS AND OTHERS, AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City has a contract and agreement for alternative paving methods with American Persian Engineering & Construction, LLC, dba APEC, LLC dated February 16, 2022, and

WHEREAS, the City is in need of paving services for asphalt paving in the Southern Pines and Esprit neighborhoods, and others, and

WHEREAS, American Persian Engineering & Construction, LLC, dba APEC, LLC, has submitted a proposal for the tasks, and

WHEREAS, in order to keep this project on schedule, the City Manager needs the authority to execute the construction agreement, required performance and payment bonds, construction change orders, amendments and other related construction contract documents as needed to expedite construction of the project up to the approved project budget.

NOW THEREFORE, BE IT RESOLVED by the City Council of the City of St. Cloud, Florida, as follows:

SECTION I. The City Manager is authorized and is directed to enter into a task authorization to that certain agreement dated February 16, 2022, as approved by the City Attorney, and any amendments thereto, between the City St. Cloud and American Persian Engineering & Construction, LLC, dba APEC, LLC

SECTION II. The City Manager or designee is authorized to execute required performance and payment bonds, construction change orders, and other related construction contract documents as needed to expedite construction of the paving in the Southern Pines and Esprit neighborhoods project up to the approved project budget.

SECTION III. The City Manager is authorized and is directed, where appropriate to issue a purchase order or “confirmation letter” to said provider.

SECTION IV. The City Manager is specifically authorized to withhold the purchase order or “confirmation letter” upon determination of any matter or factor, hereafter coming to their attention which may indicate such action is not in the City’s best interest, provided that upon such withholding, the City Manager, with reasonable dispatch, shall present the issue to the City Council, in session, for review and direction.

SECTION V. This resolution shall take effect immediately upon its adoption.

PASSED AND ADOPTED by the City Council of the City of St. Cloud, Florida this 13th day of November 2025.

CITY OF ST. CLOUD

ATTEST:

Christian B. Robertson, Mayor

Ivy Llauro, City Clerk

LEGAL IN FORM AND VALID IF ADOPTED
deBeaubien, Simmons, Knight, Mantzaris, & Neal, LLP

Daniel F. Mantzaris, City Attorney

American Persian Engineering & Construction LLC
5401 S. Kirkman Rd #336, Orlando, FL 32819
(407) 926 6811

10/16/2025

To:

Cameron Crandell, PE
Deputy Public Works Director
3101A Progress Lane
St. Cloud, FL 34769
P: 407-957-7279

We are pleased to provide you with the quote below on the services requested by Paving on 9 Streets. Below is information on the contract.
Contract: ITB 2021-162 Alternative Paving Methods.
Project Name: Asphalt Paving at 9 Streets.

No.	Projects	Price
1	Rosedale from 5th to 10th St	$144,793.00
2	10th Street (just west of Grape Ave to Grawford Ave)	$235,290.00
3	Moon Dancer Pl	$221,683.00
4	Pixie Ln	$150,667.00
5	Enchantment Ln	$163,097.00
6	Rhapsody St	$133,254.00
7	Fanciful Ct	$55,836.00
8	Daydream Pl	$187,693.00
9	Silver Thistle Ln	$291,687.00
Total		**$1,584,000.00**

Regards

Max Vaziran

CFO

American Persian Engineering & Construction LLC
5401 S. Kirkman Rd #336, Orlando, FL 32819
(407) 926 6811

10/16/2025

Rosedale from 5th to 10th St						
No	**Item Number**	**Description**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
1	25	Roadway Excavation	CY	120.00	$28.00	$3,360.00
2	76	Type III Asphaltic Concrete Sec1	TN	180.00	$350.00	$63,000.00
3	76	Type III Asphaltic Concrete Sec2	TN	180.00	$350.00	$63,000.00
4	85	Adjusting Manholes	EA	3.00	$400.00	$1,200.00
5	88	Adjusting Valve Boxes	EA	2.00	$250.00	$500.00
6	160	12" SolidTraffic Stripe(Paint)	LF	0.00	$11.00	$0.00
7	164	24" SolidTraffic Stripe(Paint)	LF	15.00	$18.00	$270.00
8	190	12" SolidTraffic Stripe Thermo	LF	0.00	$14.00	$0.00
9	194	24" SolidTraffic Stripe Thermo	LF	15.00	$20.00	$300.00
Total						$131,630.00
10	1	Mobilization	%	5.00	-	$6,581.50
11	3	Maintenance of Traffic	%	5.00	-	$6,581.50
			Grand Total			**$144,793.00**

10th Street (just west of Grape Ave to Grawford Ave)						
No	**Item Number**	**Description**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
1	57	Milling (1")	SY	2200.00	$8.00	$17,600.00
2	76	Type III Asphaltic Concrete Sec1	TN	80.00	$350.00	$28,000.00
3	76	Type III Asphaltic Concrete Sec2	TN	80.00	$350.00	$28,000.00
4	76	Type III Asphaltic Concrete Sec3	TN	60.00	$350.00	$21,000.00
5	76	Type III Asphaltic Concrete Sec4	TN	30.00	$350.00	$10,500.00
6	85	Adjusting Manholes	EA	3.00	$400.00	$1,200.00
7	88	Adjusting Valve Boxes	EA	2.00	$250.00	$500.00
8	169	6" Skip Traffic Stripe(Paint)	LF	6300.00	$9.00	$56,700.00
9	199	6" Skip Traffic Stripe Thermo	LF	6300.00	$8.00	$50,400.00
Total						$213,900.00
10	1	Mobilization	%	5.00	-	$10,695.00
11	3	Maintenance of Traffic	%	5.00	-	$10,695.00
			Grand Total			**$235,290.00**

American Persian Engineering & Construction LLC
5401 S. Kirkman Rd #336, Orlando, FL 32819
(407) 926 6811

10/16/2025

Moon Dancer Pl						
No	**Item Number**	**Description**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
1	57	Milling (1")	SY	3500.00	$8.00	$28,000.00
2	76	Type III Asphaltic Concrete Sec1	TN	150.00	$350.00	$52,500.00
3	76	Type III Asphaltic Concrete Sec2	TN	150.00	$350.00	$52,500.00
4	76	Type III Asphaltic Concrete Sec3	TN	160.00	$350.00	$56,000.00
5	85	Adjusting Manholes	EA	15.00	$400.00	$6,000.00
6	88	Adjusting Valve Boxes	EA	5.00	$250.00	$1,250.00
7	160	12" SolidTraffic Stripe(Paint)	LF	120.00	$11.00	$1,320.00
8	164	24" SolidTraffic Stripe(Paint)	LF	60.00	$18.00	$1,080.00
9	190	12" SolidTraffic Stripe Thermo	LF	120.00	$14.00	$1,680.00
10	194	24" SolidTraffic Stripe Thermo	LF	60.00	$20.00	$1,200.00
Total						$201,530.00
11	1	Mobilization	%	5.00	-	$10,076.50
12	3	Maintenance of Traffic	%	5.00	-	$10,076.50
			Grand Total			**$221,683.00**

Pixie Ln						
No	**Item Number**	**Description**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
1	57	Milling (1")	SY	2400.00	$8.00	$19,200.00
2	76	Type III Asphaltic Concrete Sec1	TN	150.00	$350.00	$52,500.00
3	76	Type III Asphaltic Concrete Sec2	TN	150.00	$350.00	$52,500.00
4	85	Adjusting Manholes	EA	10.00	$400.00	$4,000.00
5	88	Adjusting Valve Boxes	EA	5.00	$250.00	$1,250.00
6	160	12" SolidTraffic Stripe(Paint)	LF	240.00	$11.00	$2,640.00
7	164	24" SolidTraffic Stripe(Paint)	LF	40.00	$18.00	$720.00
8	190	12" SolidTraffic Stripe Thermo	LF	240.00	$14.00	$3,360.00
9	194	24" SolidTraffic Stripe Thermo	LF	40.00	$20.00	$800.00
Total						$136,970.00
10	1	Mobilization	%	5.00	-	$6,848.50
11	3	Maintenance of Traffic	%	5.00	-	$6,848.50
			Grand Total			**$150,667.00**

American Persian Engineering & Construction LLC
5401 S. Kirkman Rd #336, Orlando, FL 32819
(407) 926 6811

10/16/2025

Enchantment Ln						
No	**Item Number**	**Description**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
1	57	Milling (1")	SY	2500.00	$8.00	$20,000.00
2	76	Type III Asphaltic Concrete Sec1	TN	160.00	$350.00	$56,000.00
3	76	Type III Asphaltic Concrete Sec2	TN	170.00	$350.00	$59,500.00
4	85	Adjusting Manholes	EA	10.00	$400.00	$4,000.00
5	88	Adjusting Valve Boxes	EA	5.00	$250.00	$1,250.00
6	160	12" SolidTraffic Stripe(Paint)	LF	240.00	$11.00	$2,640.00
7	164	24" SolidTraffic Stripe(Paint)	LF	40.00	$18.00	$720.00
8	190	12" SolidTraffic Stripe Thermo	LF	240.00	$14.00	$3,360.00
9	194	24" SolidTraffic Stripe Thermo	LF	40.00	$20.00	$800.00
Total						$148,270.00
10	1	Mobilization	%	5.00	-	$7,413.50
11	3	Maintenance of Traffic	%	5.00	-	$7,413.50
			Grand Total			**$163,097.00**

Rhapsody St						
No	**Item Number**	**Description**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
1	57	Milling (1")	SY	1800.00	$8.00	$14,400.00
2	76	Type III Asphaltic Concrete Sec1	TN	130.00	$350.00	$45,500.00
3	76	Type III Asphaltic Concrete Sec2	TN	120.00	$350.00	$42,000.00
4	85	Adjusting Manholes	EA	8.00	$400.00	$3,200.00
5	88	Adjusting Valve Boxes	EA	4.00	$250.00	$1,000.00
6	160	12" SolidTraffic Stripe(Paint)	LF	480.00	$11.00	$5,280.00
7	164	24" SolidTraffic Stripe(Paint)	LF	80.00	$18.00	$1,440.00
8	190	12" SolidTraffic Stripe Thermo	LF	480.00	$14.00	$6,720.00
9	194	24" SolidTraffic Stripe Thermo	LF	80.00	$20.00	$1,600.00
Total						$121,140.00
10	1	Mobilization	%	5.00	-	$6,057.00
11	3	Maintenance of Traffic	%	5.00	-	$6,057.00
			Grand Total			**$133,254.00**

American Persian Engineering & Construction LLC
5401 S. Kirkman Rd #336, Orlando, FL 32819
(407) 926 6811

10/16/2025

Fanciful Ct						
No	**Item Number**	**Description**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
1	57	Milling (1")	SY	800.00	$8.00	$6,400.00
2	76	Type III Asphaltic Concrete Sec1	TN	110.00	$350.00	$38,500.00
3	85	Adjusting Manholes	EA	4.00	$400.00	$1,600.00
4	88	Adjusting Valve Boxes	EA	2.00	$250.00	$500.00
5	160	12" SolidTraffic Stripe(Paint)	LF	120.00	$11.00	$1,320.00
6	164	24" SolidTraffic Stripe(Paint)	LF	20.00	$18.00	$360.00
7	190	12" SolidTraffic Stripe Thermo	LF	120.00	$14.00	$1,680.00
8	194	24" SolidTraffic Stripe Thermo	LF	20.00	$20.00	$400.00
Total						$50,760.00
9	1	Mobilization	%	5.00	-	$2,538.00
10	3	Maintenance of Traffic	%	5.00	-	$2,538.00
			Grand Total			**$55,836.00**

Daydream Pl						
No	**Item Number**	**Description**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
1	57	Milling (1")	SY	3200.00	$8.00	$25,600.00
2	76	Type III Asphaltic Concrete Sec1	TN	190.00	$350.00	$66,500.00
3	76	Type III Asphaltic Concrete Sec2	TN	195.00	$350.00	$68,250.00
4	85	Adjusting Manholes	EA	10.00	$400.00	$4,000.00
5	88	Adjusting Valve Boxes	EA	4.00	$250.00	$1,000.00
6	160	12" SolidTraffic Stripe(Paint)	LF	120.00	$11.00	$1,320.00
7	164	24" SolidTraffic Stripe(Paint)	LF	60.00	$18.00	$1,080.00
8	190	12" SolidTraffic Stripe Thermo	LF	120.00	$14.00	$1,680.00
9	194	24" SolidTraffic Stripe Thermo	LF	60.00	$20.00	$1,200.00
Total						$170,630.00
10	1	Mobilization	%	5.00	-	$8,531.50
11	3	Maintenance of Traffic	%	5.00	-	$8,531.50
			Grand Total			**$187,693.00**

American Persian Engineering & Construction LLC
5401 S. Kirkman Rd #336, Orlando, FL 32819
(407) 926 6811

10/16/2025

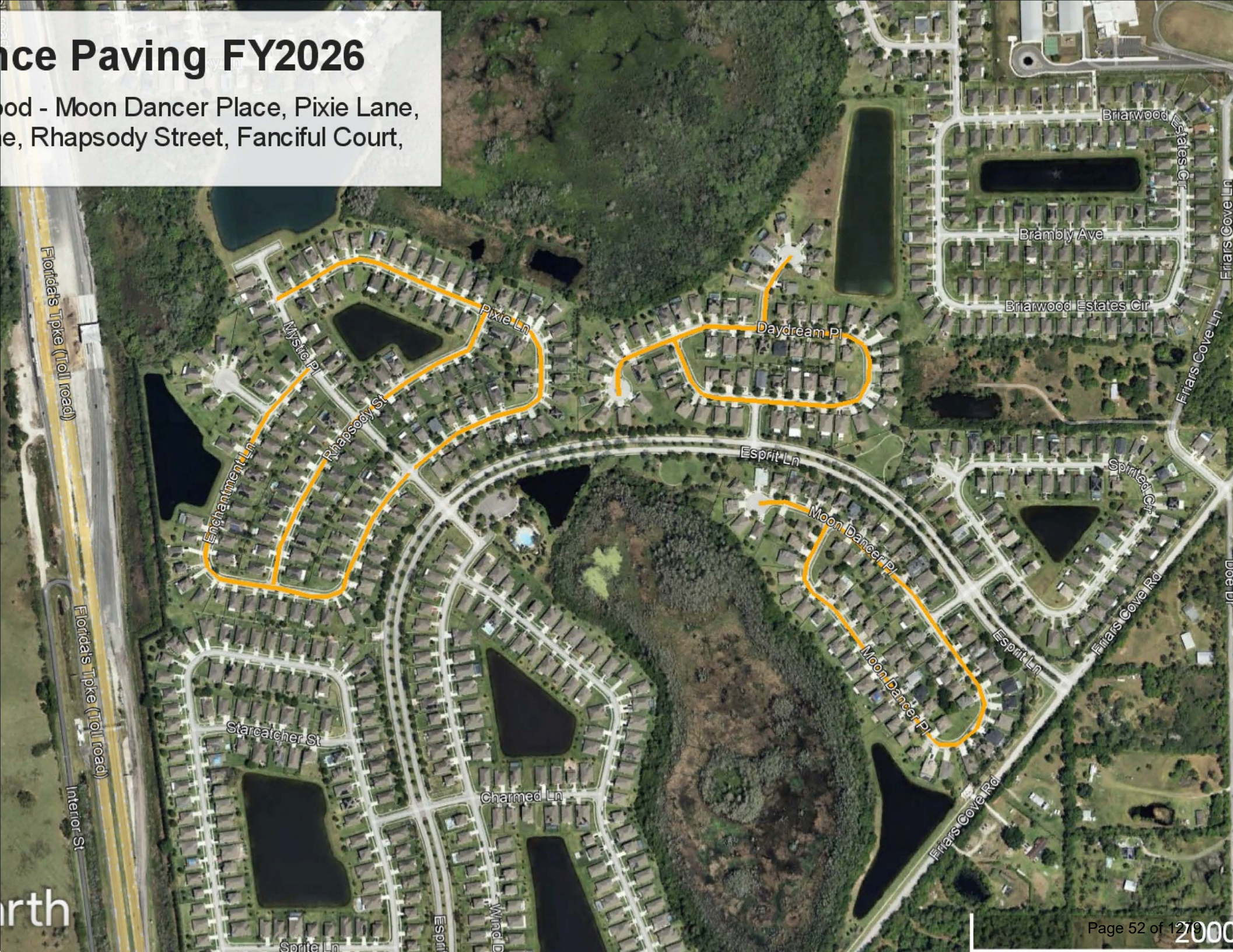
Silver Thistle Ln						
No	**Item Number**	**Description**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
1	57	Milling (1")	SY	4500.00	$8.00	$36,000.00
2	76	Type III Asphaltic Concrete Sec1	TN	165.00	$350.00	$57,750.00
3	76	Type III Asphaltic Concrete Sec2	TN	150.00	$350.00	$52,500.00
4	76	Type III Asphaltic Concrete Sec3	TN	160.00	$350.00	$56,000.00
5	76	Type III Asphaltic Concrete Sec4	TN	150.00	$350.00	$52,500.00
6	85	Adjusting Manholes	EA	16.00	$400.00	$6,400.00
7	88	Adjusting Valve Boxes	EA	10.00	$250.00	$2,500.00
8	160	12" SolidTraffic Stripe(Paint)	LF	0.00	$11.00	$0.00
9	164	24" SolidTraffic Stripe(Paint)	LF	40.00	$18.00	$720.00
10	190	12" SolidTraffic Stripe Thermo	LF	0.00	$14.00	$0.00
11	194	24" SolidTraffic Stripe Thermo	LF	40.00	$20.00	$800.00
Total						$265,170.00
12	1	Mobilization	%	5.00	-	$13,258.50
13	3	Maintenance of Traffic	%	5.00	-	$13,258.50
			Grand Total			**$291,687.00**

Project Number: ST2601	
Gas Tax	Account: 300-9595-541.34-00
Road	Cost
Moon Dancer	$ 221,683.00
Enchantment	$ 163,097.00
Rhapsody	$ 133,254.00
Fanciful	$ 55,836.00
Daydream	$ 187,693.00
Silver Thistle	$ 291,687.00
Total	$ 1,053,250.00

Project Number: ST2602	
Franchise Fees	Account: 300-9595-541.34-00
Road	Cost
Rosedale	$ 144,793.00
10th Street	$ 235,290.00
Pixie Lane	$ 150,667.00
Total	$ 530,750.00

Paving to be completed in FY26

ROAD NAME	SECTION	FROM	TO	LENGTH (FT)	WIDTH (FT)	AREA (SQFT)	FUNCTIONAL CLASS	SURFACE	LANES	INSPECT DATE	PCI	CONDITION
SILVER THISTLE LN	01	PRESERVE BLVD	PLYMOUTH TURTLE WAY	730	25	18,250	RESIDENTIAL	ASPHALT	2	10-14-2024	48	POOR
SILVER THISTLE LN	02	PLYMOUTH TURTLE WAY	BROWN BEAR CT	417	26	10,842	RESIDENTIAL	ASPHALT	2	10-14-2024	49	POOR
SILVER THISTLE LN	03	BROWN BEAR CT	GULF STURGEON LN	1,478	27	39,906	RESIDENTIAL	ASPHALT	2	10-14-2024	49	POOR
SILVER THISTLE LN	04	GULF STURGEON LN	WINDBOURNE WAY	1,160	27	31,320	RESIDENTIAL	ASPHALT	2	10-14-2024	50	POOR
ROSEDALE AVE	01	E 10TH ST	E 5TH ST	1,332	17	22,644	RESIDENTIAL	ASPHALT	2	10-21-2024	42	POOR
E 10TH ST	03	GRAPE AVE	ORANGE AVE	658	19	12,502	RESIDENTIAL	ASPHALT	2	10-21-2024	38	POOR
E 10TH ST	04	ORANGE AVE	ROSEDALE AVE	666	19	12,654	RESIDENTIAL	ASPHALT	2	10-21-2024	23	FAILED
E 10TH ST	05	ROSEDALE AVE	WHISTLER CT	479	19	9,101	RESIDENTIAL	ASPHALT	2	10-21-2024	45	POOR
E 10TH ST	06	WHISTLER CT	CRAWFORD AVE	189	19	3,591	RESIDENTIAL	ASPHALT	2	10-21-2024	52	FAIR
MOON DANCER PL	01	CUL-DE-SAC W	MOON DANCER PL	316	22	6,952	RESIDENTIAL	ASPHALT	2	10-16-2024	55	FAIR
MOON DANCER PL	02	MOON DANCER PL	MOON DANCER PL	1,807	23	41,561	RESIDENTIAL	ASPHALT	2	10-16-2024	42	POOR
MOON DANCER PL	03	MOON DANCER PL	MOON DANCER PL	579	22	12,738	RESIDENTIAL	ASPHALT	2	10-16-2024	42	POOR
MOON DANCER PL	04	MOON DANCER PL	ESPRIT LN	199	23	4,577	RESIDENTIAL	ASPHALT	2	10-16-2024	60	FAIR
PIXIE LN	01	MYSTIC PL	RHAPSODY ST	1,072	22	23,584	RESIDENTIAL	ASPHALT	2	10-20-2024	38	POOR
PIXIE LN	02	RHAPSODY ST	MYSTIC PL	920	22	20,240	RESIDENTIAL	ASPHALT	2	10-20-2024	44	POOR
ENCHANTMENT LN	01	MYSTIC PL	RHAPSODY ST	850	23	19,550	RESIDENTIAL	ASPHALT	2	10-14-2024	34	FAILED
ENCHANTMENT LN	02	RHAPSODY ST	BLITHE CT	968	21	20,328	RESIDENTIAL	ASPHALT	2	10-14-2024	42	POOR
ENCHANTMENT LN	03	BLITHE CT	MYSTIC PL	248	22	5,456	RESIDENTIAL	ASPHALT	2	10-14-2024	54	FAIR
RHAPSODY ST	01	ENCHANTMENT LN	MYSTIC PL	770	23	17,710	RESIDENTIAL	ASPHALT	2	10-21-2024	51	FAIR
RHAPSODY ST	02	MYSTIC PL	PIXIE LN	697	23	16,031	RESIDENTIAL	ASPHALT	2	10-21-2024	57	FAIR
FANCIFUL CT	01	DAYDREAM PL	CUL-DE-SAC N	356	23	8,188	RESIDENTIAL	ASPHALT	2	10-15-2024	39	POOR
DAYDREAM PL	01	CUL-DE-SAC SW	DAYDREAM PL	372	21	7,812	RESIDENTIAL	ASPHALT	2	10-20-2024	50	POOR
DAYDREAM PL	02	DAYDREAM PL	FANCIFUL CT	374	22	8,228	RESIDENTIAL	ASPHALT	2	10-20-2024	54	FAIR
DAYDREAM PL	03	FANCIFUL CT	DAYDREAM PL	1,095	22	24,090	RESIDENTIAL	ASPHALT	2	10-20-2024	50	FAIR
DAYDREAM PL	04	DAYDREAM PL	DAYDREAM PL	471	22	10,362	RESIDENTIAL	ASPHALT	2	10-20-2024	51	FAIR
DAYDREAM PL	05	ESPRIT LN	DAYDREAM PL	188	24	4,512	RESIDENTIAL	ASPHALT	2	10-20-2024	62	FAIR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e, Rhapsody Street, Fanciful Court,
Florida's Tpke (Toll road)
Florida's Tpke (Toll road)
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Rhapsody St
Enchantment Ln
Daydream Pl
Esprit Ln
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Briarwood Estates Cir
Brambly Ave
Friars Cove Ln
Friars Cove Ln
Friars Cove Rd
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Crawford Ave
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192
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Meeting: November 13, 2025

Agenda Item Type: Consent Agenda
Resolution No. 2025-163R - Security Guard Services

Procurement Agenda Item:
Resolution No. 2025-163R, a resolution of the City Council of the City of St. Cloud, Florida, authorizing the utilization of State of Florida Term Contract No. 92121500-24-STC, previously advertised for bid, which is reasonable and otherwise in the best interest of the City of St. Cloud, whose subject matter is Security Guard Services, providing for the award thereof to Universal Protection Service, LLC, d/b/a Allied Universal Security Services, LLC, and providing an effective date.
COST: Undetermined at this time as goods and services are provided on an as-needed basis. This contract will be utilized by various City departments on an as-needed basis from various approved projects and budgeted expenditure accounts.
This item is to approve an agreement for security guard services.

Strategic Key Focus Areas:
Effective Community Safety

Background Information:
This contract will be utilized for security guard services in all areas within the City. These services help to secure the public, City employees, and applicable City property.

Legal Authority:
St. Cloud Procurement Policy Article VIII, Section 1.

Budget and Recommendation:
Undetermined at this time as goods and services are provided on an as-needed basis. This contract will be utilized by various City departments on an as-needed basis from various approved projects and budgeted expenditure accounts.
Staff recommends **APPROVAL** of this request.

Finance Director's Comments:
Finance Director recommends **APPROVAL** of this item.

Procurement Director's Comments:
Recommends approval

City Manager's Comments:
City Manager recommends approval

City Council Action:

11/13/2025 - Final Action

Attachments:
1. Resolution No. 2025-163R

RESOLUTION NO. 2025-163R

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, AUTHORIZING THE UTILIZATION OF STATE OF FLORIDA TERM CONTRACT NO. 92121500-24-STC, PREVIOUSLY ADVERTISED FOR BID, WHICH IS REASONABLE AND OTHERWISE IN THE BEST INTEREST OF THE CITY OF ST. CLOUD, WHOSE SUBJECT MATTER IS SECURITY GUARD SERVICES, PROVIDING FOR THE AWARD THEREOF TO UNIVERSAL PROTECTION SERVICE, LLC, D/B/A ALLIED UNIVERSAL SECURITY SERVICES, LLC, AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of St. Cloud is in need of security guard services, and

WHEREAS, the State of Florida Department of Management Services has previously advertised Bid No. 92121500-24-STC, Security Guard Services, and

WHEREAS, the State of Florida has awarded the bid to the lowest responsive and responsible bidder, Universal Protection Service, LLC, d/b/a Allied Universal Security Services, LLC, and

WHEREAS, the City of St. Cloud wishes to extend the benefit of the State of Florida bid pursuant to the City of St. Cloud Procurement Policy, Article VIII, Section 1.

NOW THEREFORE, BE IT RESOLVED by the City Council of the City of St. Cloud, Florida, as follows:

SECTION I. State of Florida award of Bid No. 92121500-24-STC to Universal Protection Service, LLC, d/b/a Allied Universal Security Services, LLC, for Security Guard Services is found to be in the best interest of the City of St. Cloud.

SECTION II. The City Manager is authorized and directed, where appropriate, to execute a formal written agreement, as approved by the City Attorney, in the furtherance of obtaining the materials and/or services between the City of St. Cloud, Florida and Universal Protection Service, LLC, d/b/a Allied Universal Security Services, LLC.

SECTION III. The City Manager is authorized and is directed, where appropriate, to issue a purchase order or "confirmation letter" to said bidder upon a final review of the award process.

SECTION IV. The Mayor and/or City Manager are specifically authorized to withhold the purchase order or "confirmation letter" upon determination of any matter or factor, hereafter coming to their attention which may indicate such action is not in the City's best interest, provided that upon such withholding, the City Manager, with reasonable dispatch, shall present the issue to the City Council, in session, for review and direction.

SECTION V. This resolution shall take effect immediately upon adoption.

PASSED AND ADOPTED by the City Council of the City of St. Cloud, Florida, this 13th day of November 2025.

CITY OF ST. CLOUD

_____

Christian B. Robertson, Mayor

ATTEST:

_____

Ivy Llauro, City Clerk

LEGAL IN FORM AND VALID IF ADOPTED

deBeaubien, Simmons, Knight, Mantzaris & Neal LLP

_____

Daniel F. Mantzaris, City Attorney

Meeting: November 13, 2025

Agenda Item Type: Consent Agenda
Resolution No. 2025-165R DOH EMS Grant App. PD

Procurement Agenda Item:
Resolution No. 2025-165R, a resolution of the City Council of the City of St. Cloud, Florida, authorizing the grant application by City of St. Cloud/St. Cloud Police Department under the Florida Department of Health (DOH) FY 2026-2027 EMS Matching Grant Solicitation for thirty-eight (38) LIFEPAK CR2 AEDs and authorizing the Grants Division or designee to submit the application, and the City Manager to execute the application and all other documents associated with the implementation and execution of the grant on behalf of St. Cloud Police Department.
COST: up to $23,145.00 (Project total $92,580.00 – State Share 75% - $69,435.00/ City Match 25% - $23,145.00)
This item is to authorize submitting an application for the FY 2026-2027 Florida Department of Health EMS Matching Grant.

Strategic Key Focus Areas:
Effective Community Safety

Background Information:
Per Section 401.113, Florida Statutes, the Florida Department of Health is dispensing funds contained in the Emergency Medical Services (EMS) Trust Fund to counties through county, matching, and rural grants. These grants are to improve and expand prehospital emergency medical services in the state.
The St. Cloud Police Department would like to apply for funds for the purchase of thirty-eight (38) LIFEPAK automated external defibrillators (AEDs) to replace aging and unsupported models currently in patrol vehicles. The project will enhance officer readiness and interoperability with St. Cloud Fire Rescue's EMS operations.

Legal Authority:
Grants/Appropriations/Loans Policy Manual; G.A.L Policy, pages 2-4.

Budget and Recommendation:
Actual Cost: up to $23,145.00 (Project total $92,580.00 – State Share 75% - $69,435.00/ City Match 25% - $23,145.00)
Staff recommends **APPROVAL** of this request.

Finance Director's Comments:
Finance Director recommends **APPROVAL** of this item.

Procurement Director's Comments:
Recommends approval

City Manager's Comments:
City Manager recommends approval

City Council Action:
11/13/2025 - Final Action

Attachments:
1. Resolution 2025-165R

RESOLUTION NO. 2025-165R

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, AUTHORIZING THE GRANT APPLICATION BY CITY OF ST. CLOUD/ST. CLOUD POLICE DEPARTMENT UNDER THE FLORIDA DEPARTMENT OF HEALTH (DOH) FY 2026-2027 EMS MATCHING GRANT SOLICITATION FOR THIRTY-EIGHT (38) LIFEPAK CR2 AEDS AND AUTHORIZING THE GRANTS DIVISION OR DESIGNEE TO SUBMIT THE APPLICATION, AND THE CITY MANAGER TO EXECUTE THE APPLICATION AND ALL OTHER DOCUMENTS ASSOCIATED WITH THE IMPLEMENTATION AND EXECUTION OF THE GRANT ON BEHALF OF ST. CLOUD POLICE DEPARTMENT.

WHEREAS, Per Section 401.113, Florida Statutes, the Florida Department of Health is dispensing funds contained in the Emergency Medical Services (EMS) Trust Fund to counties through county, matching, and rural grants. These grants are to improve and expand prehospital emergency medical services in the state; and

WHEREAS, the City of St. Cloud, supports the Florida Department of Health's mission to improve and expand prehospital emergency medical services; and

WHEREAS, the FY 2026-2027 EMS Matching Grant provides funding to local agencies and municipalities. The St. Cloud Police Department is in need of purchasing thirty-eight (38) LIFEPAK CR2 AEDs to replace aging and unsupported models currently in patrol vehicles. The project will enhance officer readiness and interoperability with St. Cloud Fire Rescue's EMS operations.

NOW, BE IT RESOLVED by the City Council of the City of St. Cloud, Florida that:

SECTION I. The Florida Department of Health FY 2026-2027 EMS Matching Grant application by the City of St.Cloud Police Department for the purpose of purchasing thirty-eight (38) LIFEPAK CR2 AEDs is hereby authorized.

SECTION II. The Grants Division or designee is authorized to submit the FY 2026-2027 EMS Matching Grant application on behalf of the City of St. Cloud Police Department, and the City Manager is authorized to execute the application and all other documents associated with the implementation and execution of the grant on behalf of the St. Cloud Police Department.

PASSED AND ADOPTED by the City Council of the City of St. Cloud, Florida, on this 13th day of November, 2025.

CITY OF ST. CLOUD

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ATTEST: Christian B. Robertson, Mayor

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Ivy Llauro, City Clerk

LEGAL IN FORM AND VALID IF ADOPTED
deBeaubien, Simmons, Knight, Mantzaris, & Neal, LLP

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Daniel F. Mantzaris, City Attorney

Meeting: November 13, 2025

Agenda Item Type: Consent Agenda
Resolution No. 2025-167R - Withdraw from HMGP Funding-Blackberry Creek

Procurement Agenda Item:
Resolution No. 2025-167R, a resolution of the City Council of the City of St. Cloud, Florida authorizing the City Manager to execute the request to withdraw project 4337-222R from funding under the Florida Division of Emergency Management Hazard Mitigation Grant Program (HMGP) for the purpose of permitting and installation of a pump station at Blackberry Creek Ponds and providing an effective date.
COST: No cost associated with this item
This item is to authorize the City Manager to sign the Request to Withdraw Letter for the Blackberry Creek Pump Station project from Florida Department of Management HMGP funding.

Strategic Key Focus Areas:
High-Performing Government

Background Information:
Per Kevin Felblinger, Public Works Director, the City of St. Cloud received a grant from the Florida Department of Emergency Management Hazard Mitigation Program for the purpose of permitting and design of a liftstation at Blackberry Creek Ponds in order to prevent flooding in heavy rain events. As part of the grant process the City was required to provide a detailed damage estimate for the pump station which required the City at its expense to conduct a Hydrology and Hydraulics (H&H) study of the pump station. It has been determined that completing such a study would require the services of an engineering consultant and would significantly and unnecessarily increase the overall design cost of the project.

Legal Authority:
Grants/Appropriations/Loans Policy Manual; G.A.L Policy

Budget and Recommendation:
No cost associated with this item
Staff recommends **APPROVAL** of this request.

Finance Director's Comments:
Finance Director recommends **APPROVAL** of this item.

Procurement Director's Comments:
Recommend approval

City Manager's Comments:
City Manager recommends approval

City Council Action:
11/13/2025 - Final Action

Attachments:
1. Resolution No. 2025-167R

RESOLUTION NO. 2025-167R

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA AUTHORIZING THE CITY MANAGER TO EXECUTE THE REQUEST TO WITHDRAW PROJECT 4337-222R FROM FUNDING UNDER THE FLORIDA DIVISION OF EMERGENCY MANAGEMENT HAZARD MITIGATION GRANT PROGRAM (HMGP) FOR THE PURPOSE OF PERMITTING AND INSTALLATION OF A PUMP STATON AT BLACKBERRY CREEK PONDS AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City received funding through the Florida Division of Emergency Management Hazard Mitigation Grant Program (HMGP) for the purpose of permitting and installation of a pump station at Blackberry Creek Ponds; and

WHEREAS, as part of the grant process the City was required to provide a detailed damage estimate for the pump station which required the City at its expense to conduct a Hydrology and Hydraulics (H&H) study of the pump station. It has been determined that completing such a study would require the services of an engineering consultant and would significantly and unnecessarily increase the overall design cost of the project; and

WHEREAS, it is in the best interest of the City to withdraw the grant funding request for project 4337-222R from funding under the Florida Division of Emergency Management Hazard Mitigation Grant Program.

NOW, BE IT RESOLVED by the City Council of the City of St. Cloud, Florida that:

SECTION 1 The Request to Withdraw letter for the Florida Division of Emergency Management Hazard Mitigation Grant Program Project 4337-222R by the City of St. Cloud Public Services Department for the purpose of permitting and installing a pump station at the Blackberry Creek Ponds is hereby authorized.

SECTION 2 The City Manager is authorized to sign the HMGP Request to Withdraw letter on behalf of the City of St. Cloud.

SECTION 3. This Resolution shall take effect immediately upon the date of its adoption.

PASSED AND ADOPTED by the City Council of the City of St. Cloud, Florida, on this 13th day of November, 2025.

CITY OF ST. CLOUD

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ATTEST: Christian B. Robertson, Mayor

_____

Ivy Llauro, City Clerk

LEGAL IN FORM AND VALID IF ADOPTED

deBeaubien, Simmons, Knight, Mantzaris, & Neal, LLP

_____

Daniel F. Mantzaris, City Attorney

Meeting: November 13, 2025

Agenda Item Type: Consent Agenda
Resolution No. 2025-169R Maintenance Transfer of Puffin Rd. from Osceola County to City of St. Cloud

Public Works Agenda Item:
Resolution No. 2025-169R, a resolution of the City Council of the City of St. Cloud, Florida, accepting the maintenance of Puffin Road from Osceola County and providing for an effective date.
COST: Estimated average annual maintenance cost of $8,200.00
This item is to add Puffin Road to the City's infrastructure inventory for ongoing maintenance.

Strategic Key Focus Areas:
Reliable Transportation Network

Background Information:
Osceola County sent a letter, dated September 25, 2025, to the City Manager requesting that the City of St. Cloud accept the maintenance of Puffin Road since it is classified as a local roadway and the City of St. Cloud annexed more than 50% of the frontage of adjacent properties. The process for the transfer of roadway maintenance is included in the Interlocal Agreement between Osceola County and the City of St. Cloud regarding roadway maintenance.

Legal Authority:
Section 163.01, Florida Statutes, Florida Interlocal Cooperation Act of 1969.

Budget and Recommendation:
COST: Estimated average annual maintenance cost of $8,200.00
Staff recommends **APPROVAL** of this item.

Finance Director's Comments:
Finance Director recommends **APPROVAL** of this item.

Procurement Director's Comments:
N/A

City Manager's Comments:
City Manager recommends approval

City Council Action:
11/13/2025 - Final action

Attachments:

1. Resolution No. 2025-169R
2. Exhibit A - Transfer of Maintenance Request from Osceola County

RESOLUTION NUMBER 2025-169R

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, ACCEPTING THE MAINTENANCE OF PUFFIN ROAD FROM OSCEOLA COUNTY AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City of St. Cloud and Osceola County entered into the Interlocal Agreement between Osceola County and the City of St. Cloud regarding roadway maintenance, mobility fee administration, and transportation infrastructure; and

WHEREAS, the City of St. Cloud has annexed more than 50% of the frontage of properties along Puffin Road (a local roadway).

WHEREAS, Osceola County sent a letter dated September 25, 2025 requesting the City of St. Cloud assume maintenance responsibility for Puffin Road.

NOW THEREFORE BE IT RESOLVED by the City Council of the City of St. Cloud, Florida, as follows:

SECTION I. The City Council does hereby accept maintenance responsibility for Puffin Road as requested in the Osceola County letter dated September 25, 2025, attached and incorporated as Exhibit "A".

SECTION II. This resolution shall take effect immediately upon its adoption.

PASSED AND ADOPTED by the City Council of the City of St. Cloud, Florida, on this 13th day of November 2025.

CITY OF ST. CLOUD

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Christian B. Robertson, Mayor

ATTEST:

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Ivy Llauro, City Clerk

LEGAL IN FORM AND VALID IF ADOPTED.
deBeaubien, Simmons, Knight, Mantzaris & Neal, LLP

_____
Daniel F. Mantzaris, City Attorney

OSCEOLA COUNTY

BOARD OF COUNTY COMMISSIONERS

Donald S. Fisher
County Manager
don.fisher@osceola.org

Beth Anne Knight
Chief Operating Officer
beth.knight@osceola.org

Donna Renberg
Deputy County Manager
donna.renberg@osceola.org

David Tomek
Deputy County Manager
david.tomek@osceola.org

Amanda Clavijo
Assistant County Manager
amanda.clavijo@osceola.org

Celestia McCloud
Assistant County Manager
celestia.mccloud@osceola.org

1 Courthouse Square
Suite 4700
Kissimmee, FL 34741

O: 407-742-2000
F: 407-742-2391

osceola.org

OSCEOLA COUNTY

September 25, 2025

Veronica Miller, City Manager
City of St. Cloud
1300 9th Street
St. Cloud, Florida 34769
Veronica.miller@stcloudfl.gov

Subject: Puffin Road Official Transfer of Maintenance

Dear City Manager Miller:

This letter serves to provide notice that Puffin Road from US Highway 192 to Lillian Lee Road, shall officially be transferred from Osceola County to the City of St. Cloud for maintenance responsibility per Section Four of the "JPA Transportation ILA".

Given the City of St. Cloud has annexed 100% of the properties adjacent to Puffin Road and the City has approved or is currently reviewing development applications for the improvement of Puffin Road to City of St. Cloud standards, it is appropriate for the City of St. Cloud to assume maintenance responsibilities of the road segment to ensure the roadway is ultimately constructed to City standards.

The County requests the City provide acknowledgement of the official transfer of maintenance responsibility for the road segment via a letter from the City Manager or designee to the County Transportation & Transit and Public Works departments, designating the effective date of the transfer as September 25, 2025, in accordance with Section Four of the "JPA Transportation ILA".

Sincerely,

Beth Anne Knight
Chief Operating Officer/Designee

/BK/is

be first to what's next.

Meeting: November 13, 2025

Agenda Item Type: Consent Agenda
Resolution No. 2025-170R Bluebird Groves MOU 2nd Amendment

Public Works Agenda Item:
Resolution No. 2025-170R, a resolution of the City Council of the City of St. Cloud, Florida, approving and authorizing the Mayor to enter into a Second Amendment to the May 28, 2025 Memorandum of Understanding agreement with the School Board of Osceola County, Osceola County, and Center Lake Properties, for the conveyance of property and right-of-way for Bluebird Groves Parkway and Massachusetts Avenue extension and providing for an effective date.
COST: Entering into a future Mobility Fee Credit Agreement for Bluebird Groves Parkway for an estimated $1,721,195.63 in mobility fee credits (unchanged from the original agreement).
This item is to approve Resolution No. 2025-170R authorizing the Mayor to enter into a Second Amendment to the May 28, 2025 Memorandum of Understanding between the School Board of Osceola County, Florida, Osceola County, and Center Lake Properties, LLLP, to obtain property to build both the Massachusetts Avenue Extension and Bluebird Groves Parkway.

Strategic Key Focus Areas:
Effective Community Safety

Background Information:
This is an amendment to the original agreement, extending the closing date.

Bluebird Groves Parkway is needed for a driveway connection for the School Board of Osceola County's new high school on Nova Road. The City of St. Cloud, Osceola County, the School Board of Osceola County, and Center Lake Properties, LLLP, are entering a Memorandum of Understanding, to provide additional right-of-way for the roadway and associated stormwater ponds. The Memorandum of Understanding also provides for the School Board to convey right-of-way to the City of St. Cloud for the extension of Massachusetts Avenue and an associated stormwater pond.

In return, The City of St. Cloud, Osceola County, and a third-party developer will enter into an Agreement for the purpose of setting forth the terms and conditions under which Mobility Fee Credits and cash reimbursement, at the jurisdiction's discretion, will be provided to the developer for the transportation improvements on Bluebird Groves Parkway.

Legal Authority:
City of St. Cloud Code of Ordinances, Part 1- Charter and Related Laws, Subpart A - Charter, Article II, Powers of City, specifically Section 2.04, General Powers.

Section 163.01, Florida Statutes, Florida Interlocal Cooperation Act of 1969.

Budget and Recommendation:
COST:
The original agreement includes the following:
- Mobility Fee Credits: The City agrees to enter into a future agreement to provide a developer with an estimated $1,721,195.63 in mobility fee credits for the design, engineering, construction, and inspection of a portion of Bluebird Groves Parkway, a framework roadway. There is no cost change with the Second Amendment to the agreement.

Staff recommends **APPROVAL** of Resolution 2025-170R.

Finance Director's Comments:
Finance Director recommends **APPROVAL** of this item.

Procurement Director's Comments:
N/A

City Manager's Comments:
City Manager recommends approval

City Council Action:
11/13/2025 - Final action

Attachments:
1. Resolution No. 2025-170R
2. Exhibit A - Second Amendment Bluebird MOU (rev'd 3)-
3. Exhibit B Resolution 2025-145R-First Amendment to Bluebird Groves Pkwy MOU - signed
4. Exhibit C Resolution No. 2025-037R executed by City of St. Cloud

RESOLUTION NUMBER 2025-170R

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, APPROVING AND AUTHORIZING THE MAYOR TO ENTER INTO A SECOND AMENDMENT TO THE MAY 28, 2025, MEMORANDUM OF UNDERSTANDING AGREEMENT WITH THE SCHOOL BOARD OF OSCEOLA COUNTY, OSCEOLA COUNTY AND CENTER LAKE PROPERTIES FOR THE CONVEYANCE OF PROPERTY AND RIGHT-OF-WAY FOR BLUEBIRD GROVES PARKWAY AND MASSACHUSETTS AVENUE EXTENSION AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, School Board, City, Developer and County entered into the Bluebird Groves Parkway Memorandum of Understanding on May 28, 2025 ("**Agreement**") pursuant to which the School Board would sell to the City the Massachusetts Avenue Property and the Bluebird Stormwater Property, and Developer would sell to School Board the Developer Property; and

WHEREAS, the Bluebird Groves Parkway Closing was to occur on September 4, 2025; and

WHEREAS, the parties require an extension of the closing date.

NOW THEREFORE BE IT RESOLVED by the City Council of the City of St. Cloud, Florida, as follows:

SECTION I. The City Council does hereby approve and authorize the Mayor to enter into the Second Amendment to the May 28, 2025, Memorandum of Understanding Agreement between the School Board of Osceola County, Osceola County, Center Lake Properties and the City of St. Cloud and as more particularly set forth in Exhibit "A".

SECTION II. This resolution shall take effect immediately upon its adoption.

PASSED AND ADOPTED by the City Council of the City of St. Cloud, Florida, on this 13th day of November 2025.

CITY OF ST. CLOUD

_____
Christian B. Robertson, Mayor

ATTEST:

_____
Ivy Llauro, City Clerk

LEGAL IN FORM AND VALID IF ADOPTED.
deBeaubien, Simmons, Knight, Mantzaris & Neal, LLP

_____
Daniel F. Mantzaris, City Attorney

SECOND AMENDMENT TO BLUEBIRD GROVES PARKWAY MEMORANDUM OF UNDERSTANDING

THIS SECOND AMENDMENT TO BLUEBIRD GROVES PARKWAY MEMORANDUM OF UNDERSTANDING ("**Second Amendment**") is made as of the last date signed below, by and between the **SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA**, a public body corporate organized and existing under the Constitution and laws of the State of Florida, ("**School Board**"), the **CITY OF ST. CLOUD**, a municipal corporation organized and existing under the laws of the State of Florida , ("**City**"), **CENTER LAKE PROPERTIES, LLLP**, a Florida limited liability limited partnership ("**Developer**"), and the **BOARD OF COUNTY COMMISSIONERS OF OSCEOLA COUNTY, FLORIDA** ("**County**"), a political subdivision of the State of Florida .

W I T N E S S E T H:

WHEREAS, School Board, City, Developer and County entered into the Bluebird Groves Parkway Memorandum of Understanding on May 28, 2025 ("**Agreement**") pursuant to which the School Board would sell to the City the Massachusetts Avenue Property and the Bluebird Stormwater Property, and Developer would sell to School Board the Developer Property, which Agreement was amended by that First Amendment to Bluebird Groves Parkway Memorandum of Understanding ("**First Amendment**" and together the with Agreement, the "**Amended Agreement**"); and

WHEREAS, ordering the legal description, survey and title commitment for the 0.64 Acre Property are all dependent upon the School Board receiving final design plans for Bluebird Groves Parkway ("**Final Design Plans**"); and

WHEREAS, the Final Design Plans will not be complete until January 2026, whereas ninety (90) percent design plans for Bluebird Groves Parkway have been completed and the parties believe the right of way required for Bluebird Groves Parkway is unlikely to change;

WHEREAS, the construction of Bluebird Groves Parkway is expected to begin as soon as permits have been obtained, which could be as soon as January 2026; and

WHEREAS, under the Amended Agreement the 0.64 Acre Property Closing will not occur until, at the earliest, the end of April 2026, thirty (30) days after the City's seventy (70) day Inspection Period, which also depends upon turnover of the Final Design Plans; and

WHEREAS, the School Board is constructing a high school adjacent to Bluebird Groves, Parkway, which is expected to ~~open~~ be completed in May 2026 and which requires Bluebird Groves Parkway for access; and

WHEREAS, the parties agree that the 0.64 Acre Property Closing should be accelerated to allow construction of Bluebird Groves Parkway to begin as soon as possible after permitting is received; and

WHEREAS, there is a typographical error in Section 7 of the Amended Agreement with subparagraph "a" being listed as "b" such that there are two Section 7.b.s; and

WHEREAS, the ninety (90) percent design plans indicate that a portion of the Developer's Property being retained by the School Board will require grading for the construction of Bluebird Groves Parkway, necessitating a temporary construction easement; and

WHEREAS, the City is still awaiting the survey for the Stormwater Pond, which survey may not be complete until after November 7, 2025, the Closing Date set in the First Amendment, requiring a further extension of the Bluebird Groves Parkway Closing.

NOW THEREFORE, in consideration of the premises, conditions, mutual and reciprocal obligations, and covenants contained herein; and for other good and valuable consideration, the receipt, adequacy and sufficiency of which is hereby acknowledged by and among the parties; the parties to this Agreement hereby agree as follows:

1. RECITALS. The foregoing recitals in the WHEREAS clauses are true and correct and are incorporated herein and made a part of this Agreement by reference.

2. EFFECTIVE DATE. The later of the date of approval by the Developer, City Council of the City of St. Cloud, the Board of County Commissioners of Osceola County, or the School Board of Osceola County, Florida, shall be referred to herein as the "**Effective Date**."

3. AMENDMENT OF SECTION 3.H. Section 3.h. is deleted and replaced with:

The City and the County agree to provide ninety (90) percent design plans for Bluebird Groves Parkway to the School Board as expeditiously as possible but in no event later than ten (10) days after the Effective Date.

4. AMENDMENT OF SECTION 3.I. Section 3.i. is deleted and replaced with:

Upon the School Board's receipt of the ninety (90) percent design plans for Bluebird Groves Parkway, the School Board shall prepare the legal description for the 0.64 Acre Property, which legal description will be provided to the City and added to this Agreement as **Exhibit "D"** without the need for further amendment.

5. AMENDMENT OF SECTION 7.

a. The first incorrectly labeled Section 7.b. is corrected to Section "7.a."

b. The correctly labeled Section 7.b is deleted and replaced with:

Within thirty (30) days of the Effective Date of this Agreement, the City and/or the School Board may obtain an ALTA survey on the Bluebird Stormwater Property and the Massachusetts Avenue Property. Within thirty (30) days of the Effective Date of this Agreement, the School Board will obtain an ALTA survey on the Developer Property. Within thirty (30) days of receipt of the ninety (90) percent design plans for Bluebird Groves Parkway the School Board will obtain an ALTA survey on the 0.64 Acre Property. In the event a survey reflects any easement, encroachments, rights-of-way, roads, lack of access, deficiencies, gaps or gores or hiatus between any of the parcels included within or between each property and any adjoining streets or roads, or any other adverse matters not acceptable to the party ordering the survey, such party shall notify the other party of such party's objections to the survey on or before thirty (30) days after receipt of the survey. Objections to the survey shall be treated as Title Objections pursuant to this Section 7.

6. AMENDMENT OF SECTION 8.A. The second sentence of Section 8.a. is deleted and replaced with:

The City shall have a period commencing on its receipt of the legal description of the 0.64 Acre Property ("**0.64 Acre Property Legal Description Receipt Date**") and ending on the date that is thirty (30) days following the 0.64 Acre Property Legal Description Receipt Date (the "**0.64 Acre Property Inspection Period**") to complete its own due diligence, including any on-site inspections, of the suitability and condition of the 0.64 Acre Property. The School Board shall cause its Phase I Environmental Report to be certified to the City.

7. TEMPORARY CONSTRUCTION EASEMENT. The School Board agrees to convey a temporary construction easement to the County, substantially in the form attached hereto as **Exhibit "A"**.

8. EXTENSION OF CLOSING DATE. The Bluebird Groves Parkway Closing shall occur on or before December 10, 2025.

9. CAPITALIZED TERMS. Terms not defined in this Second Amendment shall have the meaning provided in the Agreement.

10. NO FURTHER CHANGES. Except as expressly provided in this Second Amendment, no other terms, conditions, provisions, or obligations of the Agreement have been amended or altered by this Second Amendment, and thus, shall remain in full force and effect.

11. CONFLICTS. If any terms of this Second Amendment shall conflict with any terms of the Agreement, then this Second Amendment shall supersede any such conflicting terms in the Agreement.

12. COUNTERPARTS. This Second Amendment may be executed in multiple counterparts, each of which shall constitute an original, but all of which taken together shall constitute one and the same instrument, and signature pages from one counterpart may be removed and attached to another counterpart to create a single, integrated counterpart with all necessary

signatures. Delivery of an executed signature page of this Second Amendment by facsimile or electronic transmission shall be as effective as delivery of a manually-executed counterpart thereof and may be used to all purposes. Signatures of the parties transmitted by facsimile or electronic transmission shall be deemed to be their original signatures for all purposes.

[Remainder of Page Intentionally Left Blank. Signature Pages Follow.]

IN WITNESS WHEREOF, the parties hereto have made and executed this Second Amendment as of the date set forth below.

Signed, sealed and delivered in the presence of:

Witness:

_____
Print Name:_____
Address: _____
_____

_____
Print Name:_____
Address: _____
_____

THE SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA

By:_____
Print Name:_____
Chair

ATTEST:

By:_____
Superintendent

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization, this ____ day of _____, 20__ , by _____ as _____ of the School Board of Osceola County, Florida, a public body corporate organized and existing under the Constitution and laws of the State of Florida ☐ who is personally known to me or ☐ who has produced _____ as identification.

(Seal)

_____
Notary Public - State of Florida
Print Notary Name:
My Commission Number is:

IN WITNESS WHEREOF, the parties hereto have, by their duly authorized representatives, executed this Second Amendment on the dates set forth below.
DATED this _____ day of _____ 2025.

"COUNTY":

ATTEST:
OSCEOLA COUNTY CLERK
OF THE BOARD

BOARD OF COUNTY COMMISSIONERS OF OSCEOLA COUNTY, FLORIDA

By:_____

By:_____
Name: _____
Chair/Vice Chair

As authorized for execution at the Board of County Commissioners meeting of:

_____

.

IN WITNESS WHEREOF, the parties hereto have made and executed this Second Amendment as of the date set forth below.

CITY OF ST. CLOUD

By:_____
Christian B. Robertson, Mayor

ATTEST:
CITY OF ST. CLOUD CITY CLERK

By: _____
Ivy Llauro, City Clerk

As authorized for execution at the City Council meeting of:

_____

.

IN WITNESS WHEREOF, the parties hereto have made and executed this Second Amendment as of the date set forth below.

Signed, sealed and delivered in the presence of:

Witnesses:

_____
Print Name:_____
Address: _____
_____

_____
Print Name:_____
Address: _____
_____

CENTER LAKE PROPERTIES, LLLP

By: Pineloch Management Corp., its General Partner

By:_____
Print Name:_____
Its:_____

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization, this ____ day of _____, 20__ , by _____ as _____ of, Pineloch Management Corp., the general partner of Center Lake Properties, LLLP, ☐ who is personally known to me or ☐ who has produced _____ as identification.

(Seal)

_____
Notary Public - State of Florida
Print Notary Name:
My Commission Number is:

.

EXHIBIT "A"
Form of Temporary Construction Easement

TEMPORARY CONSTRUCTION EASEMENT

THIS EASEMENT granted by **SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA**, a public body corporate organized and existing under the Constitution and laws of the State of Florida, whose address is 817 Bill Beck Boulevard, Kissimmee, Florida 34744, hereinafter referred to as "Grantor" to **OSCEOLA COUNTY**, a political subdivision of the State of Florida, whose address is 1 Courthouse Square, Kissimmee, Florida 34741, hereinafter referred to as "County".

W I T N E S S E T H:

WHEREAS, Grantor is the fee simple owner of that Real Property more particularly described in **Exhibit "A"**, attached hereto and made a binding part hereof by this reference (the "Property"); and

WHEREAS, the County has designed roadway improvements for Bluebird Groves Parkway (the "Project"); and

WHEREAS, the Grantor has agreed to grant the County temporary construction easements for grading the Property adjacent to the Project.

NOW, THEREFORE, in consideration of the sum of Ten Dollars ($10.00), the mutual advantages inuring to each party and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the parties agree as follows.

1. Recitations. The foregoing recitations are true and correct and are incorporated herein by this reference.

2. Grant of Temporary Construction Easement. Grantor hereby grants, bargains, sells, conveys and declares a temporary construction easement for the benefit of County, County's successors and assigns, and their respective employees, agents, contractors, subcontractors, independent contractors, and licensees over, under, upon and through the Property, subject to the terms, conditions and limitations set forth herein. Grantor does hereby covenant with the County that it is lawfully seized and possessed of the Property and that Grantor has good and lawful right to convey an easement over the same.

3. Purpose of Easement. The purpose of the Easement shall be to permit County, through itself, its employees, agents, contractors, subcontractors, and independent contractors, to enter upon the Property as is necessary to grade the Property in order to construct Bluebird Groves Parkway, and any other improvements associated with such improvement,

4. Termination. This Temporary Construction Easement shall automatically terminate and shall be considered null and void without further action of either party being required upon the earlier of: (i) completion of the work contemplated as evidenced by a written notice thereof from County to Grantor stating that the Temporary Construction Easement granted

herein is no longer needed by County; or (ii) five (5) years from the effective date of this Easement.

5. Conditions of Easement. Grantor hereby agrees that it shall not bring any type of hazardous waste or otherwise toxic materials on to the Property. County shall only utilize the Property for purposes of installing, maintaining and operating the Easement.

6. Incidental Rights. The Easement herein granted and conveyed by the Grantor to the County shall specifically include, but shall not be limited to, the right of County, its employees, agents, contractors, subcontractors, and independent contractors: (a) to patrol, inspect, alter, improve, maintain, repair, rebuild, and remove all or any part of the Temporary Construction Improvements consistent with the terms of this Easement; (b) to trim, cut, or remove trees, bushes, undergrowth and other obstructions or improvements that negatively impact the expansion and improvement; (c) to enter onto that portion of Grantor's real property reasonably necessary for County to exercise the rights granted in this Easement, upon reasonable notice to Grantor of such entry; and (d) all other rights and privileges reasonably necessary or convenient for County's enjoyment and use of the foregoing Easement for the purposes described above and in furtherance of the provisions set forth herein.

7. Hold Harmless. County, its successors and assigns, expressly agrees to defend, indemnify, save and hold Grantor harmless from and against any loss, injury, damage, liability, suit, claim, cost or expense incurred or suffered as a result of any of County's rights hereunder by County, or County's affiliates. Nothing contained herein shall be construed as a waiver of County's or Grantor's sovereign immunity beyond the limits described in Section 768.28, Florida Statutes., as same may be amended from time to time. The provisions of this paragraph shall survive termination.

8. Insurance. Unless waived by Grantor in writing, County shall maintain, and shall cause County's affiliates to maintain, the following insurance, at each entity's sole cost and expense: (i) Commercial General Liability for all operations and personal liability and bodily injury for a minimum of $1,000,000 each occurrence and $2,000,000 in the aggregate with deductible or retention of not less than $500; (ii) Workers' Compensation insurance for its employees working on the School Property in statutory limits as required by Florida law; (iii) Professional Liability for any wrongful or negligent act of each entity's employees while occupying the Property. County may provide a statement of self-insurance in lieu of the liability insurance requirements set forth above. County shall furnish proof of all such insurance required under this paragraph in the form and manner prescribed by Grantor's Risk and Benefits Management Department, to Grantor within ten (10) days after the Effective Date. It shall be Grantor's obligation to provide County with the specific form and manner in which proof of insurance shall be submitted as a condition precedent to the ten (10) day period within which County must submit same to Grantor. The certificate shall name Grantor as an additional insured. Failure to have adequate proof of current insurance meeting the requirements of this section or to file such proof with

Grantor's Risk and Benefits Management Department shall entitle Grantor to immediately suspend the privilege of County to use the Easement until such proof is furnished

9. Amendment. This Easement may not be modified, amended, or terminated without the prior written consent of Grantor and County.

10. Governing Law. This Easement shall be governed by and construed in accordance with the laws of the State of Florida.

11. Severability. If any provision of this Easement is declared invalid or unenforceable, then the remainder of this Easement shall continue in full force and effect.

12. Effective Date. The effective date of this Easement shall be the date upon which the last of the parties thereto executes this Easement ("Effective Date").

[Signatures appear on the following page]

IN WITNESS WHEREOF, the said Grantor has caused these presents to be executed in its name, the day and year first above written.

Signed, Sealed and Delivered
in the presence of:

GRANTOR:
SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA, a public body corporate organized and existing under the Constitution and laws of the State of Florida

WITNESS: _____ By: _____

Print Name: _____ Name: _____, Chair

Attest: _____

WITNESS: _____ Mark Shanoff, Ed. D, Superintendent

Print Name: _____

(CORPORATE SEAL)

STATE OF _____

COUNTY OF _____

The forgoing instrument was acknowledged before me this _____ day of _____ 20__ by _____as_____ of **THE SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA, a public body corporate organized and existing under the Constitution and laws of the State of Florida**, on behalf of the corporation by means of □physical presence or □ online notarization. She/He personally appeared before me, is personally known to me or has produced _____ as identification and who did (did not) take an oath.

(SEAL)

_____

Notary Public

_____

Print Name

Commission Expires:

.

THE PROPERTY CONVEYED BY THIS TEMPORARY CONSTRUCTION EASEMENT is accepted for public use by the Osceola County Board of County Commissioners at its regular meeting dated the _____day of _____ 202__.

BOARD OF COUNTY COMMISSIONERS

OF OSCEOLA COUNTY, FLORIDA

By: _____

Chair / Vice Chair

ATTEST:

_____

Clerk / Deputy Clerk

As authorized for execution at the Board of

County Commissioners meeting of:

_____

.

EXHIBIT "A"

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ORIGINAL

RESOLUTION NUMBER 2025-145R

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, APPROVING AND AUTHORIZING THE MAYOR TO ENTER INTO A FIRST AMENDMENT TO THE MAY 28, 2025, MEMORANDUM OF UNDERSTANDING AGREEMENT WITH THE SCHOOL BOARD OF OSCEOLA COUNTY, OSCEOLA COUNTY AND CENTER LAKE PROPERTIES FOR THE CONVEYANCE OF PROPERTY AND RIGHT-OF-WAY FOR BLUEBIRD GROVES PARKWAY AND MASSACHUSETTS AVENUE EXTENSION AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, School Board, City, Developer and County entered into the Bluebird Groves Parkway Memorandum of Understanding on May 28, 2025 ("**Agreement**") pursuant to which the School Board would sell to the City the Massachusetts Avenue Property and the Bluebird Stormwater Property, and Developer would sell to School Board the Developer Property; and

WHEREAS, the Bluebird Groves Parkway Closing was to occur on September 4, 2025; and

WHEREAS, the parties require an extension of the closing date.

NOW THEREFORE BE IT RESOLVED by the City Council of the City of St. Cloud, Florida, as follows:

SECTION I. The City Council does hereby approve and authorize the Mayor to enter into the First Amendment to the May 28, 2025, Memorandum of Understanding Agreement between the School Board of Osceola County, Osceola County, Center Lake Properties and the City of St. Cloud and as more particularly set forth in Exhibit "A".

SECTION II. This resolution shall take effect immediately upon its adoption.

PASSED AND ADOPTED by the City Council of the City of St. Cloud, Florida, on this 18th day of September 2025.

CITY OF ST. CLOUD

Christian B. Robertson, Mayor

ATTEST:

Ivy Llauro, City Clerk

LEGAL IN FORM AND VALID IF ADOPTED.
deBeaubien, Simmons, Knight, Mantzaris & Neal, LLP

Daniel F. Mantzaris, City Attorney

FIRST AMENDMENT TO BLUEBIRD GROVES PARKWAY MEMORANDUM OF UNDERSTANDING

THIS FIRST AMENDMENT TO BLUEBIRD GROVES PARKWAY MEMORANDUM OF UNDERSTANDING ("First Amendment") is made as of the last date signed below, by and between the **SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA**, a public body corporate organized and existing under the Constitution and laws of the State of Florida, ("**School Board**"), the **CITY OF ST. CLOUD**, a municipal corporation organized and existing under the laws of the State of Florida , ("**City**"), **CENTER LAKE PROPERTIES, LLLP**, a Florida limited liability limited partnership ("**Developer**"), and the **BOARD OF COUNTY COMMISSIONERS OF OSCEOLA COUNTY, FLORIDA** ("**County**"), a political subdivision of the State of Florida .

WITNESSETH:

WHEREAS, School Board, City, Developer and County entered into the Bluebird Groves Parkway Memorandum of Understanding on May 25, 2025 ("**Agreement**") pursuant to which the School Board would sell to the City the Massachusetts Avenue Property and the Bluebird Stormwater Property, and Developer would sell to School Board the Developer Property; and

WHEREAS, the Bluebird Groves Parkway Closing was to occur on September 4, 2025; and

WHEREAS, the parties require an extension of the closing date.

NOW THEREFORE, in consideration of the premises, conditions, mutual and reciprocal obligations, and covenants contained herein; and for other good and valuable consideration, the receipt, adequacy and sufficiency of which is hereby acknowledged by and among the parties; the parties to this Agreement hereby agree as follows:

1. RECITALS. The foregoing recitals in the WHEREAS clauses are true and correct and are incorporated herein and made a part of this Agreement by reference.

2. EFFECTIVE DATE. The later of the date of approval by the Developer, City Council of the City of St. Cloud, the Board of County Commissioners of Osceola County, or the School Board of Osceola County, Florida, shall be referred to herein as the "**Effective Date**."

3. EXTENSION OF CLOSING DATE. The Bluebird Groves Parkway Closing shall occur on or before November 7, 2025.

4. CAPITALIZED TERMS. Terms not defined in this First Amendment shall have the meaning provided in the Agreement.

5. NO FURTHER CHANGES. Except as expressly provided in this First Amendment, no other terms, conditions, provisions, or obligations of the Agreement have been amended or altered by this First Amendment, and thus, shall remain in full force and effect.

6. CONFLICTS. If any terms of this First Amendment shall conflict with any terms of the Agreement, then this First Amendment shall supersede any such conflicting terms in the Agreement.

7. COUNTERPARTS. This First Amendment may be executed in multiple counterparts, each of which shall constitute an original, but all of which taken together shall constitute one and the same instrument, and signature pages from one counterpart may be removed and attached to another counterpart to create a single, integrated counterpart with all necessary signatures. Delivery of an executed signature page of this First Amendment by facsimile or electronic transmission shall be as effective as delivery of a manually-executed counterpart thereof and may be used to all purposes. Signatures of the parties transmitted by facsimile or electronic transmission shall be deemed to be their original signatures for all purposes.

[Remainder of Page Intentionally Left Blank. Signature Pages Follow.]

IN WITNESS WHEREOF, the parties hereto have made and executed this First Amendment as of the date set forth below.

Signed, sealed and delivered in the presence of:

Witness:

Print Name: Aki Nunez
Address: 817 Bill Beck Blvd.
Kissimmee FL 34744

Print Name: Dayana Valverde
Address: 817 Bill Beck Blvd
Kissimmee FL, 34744

THE SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA

By: _____
Print Name: Heather Kahan
Chair

ATTEST:

By: _____
Superintendent

STATE OF FLORIDA
COUNTY OF Osceola

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization, this 9 day of September, 2025, by Heather Kahan as chair of the School Board of Osceola County, Florida, a public body corporate organized and existing under the Constitution and laws of the State of Florida ☑ who is personally known to me or ☐ who has produced _____ as identification.

(Seal)

Notary Public State of Florida
Joimicel Rivera
My Commission HH 711343
Expires 9/8/2029

_____
Notary Public - State of Florida
Print Notary Name: Joimicel Rivera
My Commission Number is: HH 711343

IN WITNESS WHEREOF, the parties hereto have, by their duly authorized representatives, executed this First Amendment on the dates set forth below.
DATED this _____ day of _____ 2025.

"COUNTY":

ATTEST:
OSCEOLA COUNTY CLERK
OF THE BOARD

By: _____

As authorized for execution at the Board of County Commissioners meeting of:

May 05, 2025

BOARD OF COUNTY
COMMISSIONERS OF OSCEOLA
COUNTY, FLORIDA

By: _____
Name: Don Fisher
County Manager

IN WITNESS WHEREOF, the parties hereto have made and executed this First Amendment as of the date set forth below.

CITY OF ST. CLOUD

By: _____
Christian B. Robertson, Mayor

ATTEST:
CITY OF ST. CLOUD CITY CLERK

By: _____
Ivy Llauro, City Clerk

As authorized for execution at the City Council meeting of:

9/18/2025

IN WITNESS WHEREOF, the parties hereto have made and executed this First Amendment as of the date set forth below.

Signed, sealed and delivered in the presence of:

Witnesses:

CENTER LAKE PROPERTIES, LLLP,
a Florida limited liability limited partnership

By: Pineloch Management Corporation, a Florida corporation, as its General Partner

By: _____
Matthew S. Smith, as its Executive Vice President

Signature: _____
Print name: _____
Address: 102 W. Pineloch Ave, Suite 10
Orlando FL 32806

Signature: Patricia Kirby
Print name: PATRICIA KIRBY
Address: 102 W. Pineloch Ave, Suite 10
Orlando FL 32806

STATE OF FLORIDA
COUNTY OF ORANGE

The foregoing instrument was acknowledged before me by means of [XX] physical presence or [ ] online notarization, this 28th day of August, 2025, by Matthew S. Smith, as Executive Vice President of Pineloch Management Corporation, a Florida corporation, the General Partner of CENTER LAKE PROPERTIES, LLLP, a Florida limited liability limited partnership, who is [XX] personally known to me or [ ] has produced _____ as identification.

Patricia Yvonne Kirby
Signature of Notary Public
Print Name: PATRICIA YVONNE KIRBY
Commission Expires: FEBRUARY 27, 2026

PATRICIA YVONNE KIRBY
Commission # HH 232468
Expires February 27, 2026

ORIGINAL

RESOLUTION NUMBER 2025-037R

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, ENTERING INTO AN AGREEMENT WITH THE SCHOOL BOARD OF OSCEOLA COUNTY, OSCEOLA COUNTY AND CENTER LAKE PROPERTIES, LLLP, FOR CONVEYANCE OF PROPERTY AND RIGHT-OF-WAY FOR BLUEBIRD GROVES PARKWAY, A FRAMEWORK ROAD, AND CONVEYANCE OF RIGHT-OF-WAY FOR THE MASSACHUSETTS AVENUE EXTENSION, FOR ENTERING INTO A FUTURE TRI-PARTY AGREEMENT TO CONSTRUCT BLUEBIRD GROVES PARKWAY; AUTHORIZING THE MAYOR TO EXECUTE THIS AGREEMENT AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, in Section 3 of the agreement, the City of St. Cloud and Osceola County agree to design and construct Bluebird Groves Parkway, a framework roadway as set forth in Exhibit "E" of the agreement, through a future Tri-Party Transportation Agreement using Mobility Fees; and

WHEREAS, in Section 4 of the agreement, the School Board of Osceola County agrees to convey to the City of St. Cloud property Massachusetts Avenue as set forth in Exhibit "I" of the agreement; and

WHEREAS, in Section 3 of the agreement, the School Board of Osceola County agrees to convey to the City of St. Cloud property for Bluebird Groves Parkway as set forth in Exhibit "J" of the agreement; and

WHEREAS, in Section 3 of the agreement, the School Board of Osceola County agrees to convey to the City of St. Cloud property for the Bluebird Stormwater Pond as set forth in Exhibit "K" of the agreement; and

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, as follows:

SECTION I. The City Council of the City of St. Cloud hereby approves an agreement with the School Board of Osceola County for the Bluebird Groves Memorandum of Understanding as set forth in Exhibit "A" of the agreement.

SECTION II. The City Council of the City of St. Cloud hereby approves an agreement with the Developer for the conveyance of right-of-way in exchange for entering into a mobility fee credit agreement.

SECTION III. The City Council of the City of St. Cloud, hereby approves and authorizes the Mayor to execute the Agreement set forth in Exhibit "A" hereto.

SECTION IV. This resolution shall take effect immediately upon adoption by the City Council.

PASSED AND ADOPTED this 8th day of May 2025.

CITY OF ST. CLOUD

Christian B. Robertson, Mayor

ATTEST:

Ivy Llauro, City Clerk

LEGAL IN FORM AND VALID IF ADOPTED.
deBeaubien, Simmons, Knight, Mantzaris & Neal, LLP

Daniel F. Mantzaris, City Attorney

Pursuant to Section 695.26 (3) (f), this instrument is exempt from Chapter 695, F.S

BLUEBIRD GROVES PARKWAY MEMORANDUM OF UNDERSTANDING

THIS BLUEBIRD GROVES PARKWAY MEMORANDUM OF UNDERSTANDING ("**Agreement**") is made as of the last date signed below, by and between the **SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA**, a public body corporate organized and existing under the Constitution and laws of the State of Florida, ("**School Board**"), the **CITY OF ST. CLOUD**, a municipal corporation organized and existing under the laws of the State of Florida , ("**City**"), **CENTER LAKE PROPERTIES, LLLP**, a Florida limited liability limited partnership ("**Developer**"), and the **BOARD OF COUNTY COMMISSIONERS OF OSCEOLA COUNTY, FLORIDA** ("**County**"), a political subdivision of the State of Florida .

WITNESSETH:

WHEREAS, School Board owns that certain real property, consisting of approximately 6.5 acres, more or less, located in the City of St. Cloud, Florida, as more particularly described or depicted on **Exhibit "A"** attached hereto and by reference made a part hereof (the "**Massachusetts Avenue Property**"); and

WHEREAS, School Board owns that certain real property, consisting of approximately 1.24 acres, more or less, located in the City of St. Cloud, Florida, as more particularly described or depicted on **Exhibit "B"** attached hereto and by reference made a part hereof (the "**Bluebird Stormwater Property**"); and

WHEREAS, School Board is constructing a high school (the "**High School**") scheduled to open in May 2026 and bus depot on property owned by the School Board that currently includes the Bluebird Stormwater Property; and

WHEREAS, Developer owns that certain real property, consisting of approximately 0.97 acres, more or less, located in the City of St. Cloud, Florida, as more particularly described or depicted on **Exhibit "C"** (the "**Developer Property**");

WHEREAS, School Board desires to acquire the Developer Property in order to convey 0.64 acres of it (the "**0.64 Acre Property**"), as more particularly described or depicted on **Exhibit "D"** attached hereto and by reference made a part hereof, to the City for construction of Bluebird Groves Parkway; and

WHEREAS, the County is the record owner of a portion of the property upon which Bluebird Groves Parkway will be constructed; and

WHEREAS, the City and the County, are proceeding with design and construction of Bluebird Groves Parkway, allocating responsibility for the design and construction such that the City is responsible for the design and construction of that portion of Bluebird Groves Parkway from Nova Road to the western edge of the Amelia Groves development ("**City Portion of Bluebird Groves Parkway**"), and the County is responsible for the design and construction of

Bluebird Groves Parkway from the western edge of the Amelia Groves development to Pine Groves Road, as approximately depicted in **Exhibit "E"**; and

WHEREAS, the design for Bluebird Groves Parkway shall include a right- in, right-out curb cut as approximately depicted in **Exhibit "F"**.

WHEREAS, the City and the County have agreed that the City Portion of Bluebird Groves Parkway will be completed before May 1, 2026); and

WHEREAS, the City and the County will pay for the design and construction of Bluebird Groves Parkway through the issuance of mobility fee credits, which estimated cost is reflected in **Exhibit "G"**; and

WHEREAS, the City portion of the mobility fee credits to be issued in connection with the City Portion of Bluebird Groves Parkway is estimated to be $1,721,195.63 (the "**City Mobility Fee Credits**"); and

WHEREAS, the construction of Bluebird Groves Parkway will require the discharge of the stormwater from the City Portion of Bluebird Groves Parkway onto the Bluebird Stormwater Property; and

WHEREAS, the County will convey Bluebird Groves Parkway to the City pursuant to a separate agreement; and

WHEREAS, City seeks to acquire the 0.64 Acre Property from the School Board in order to have Bluebird Groves Parkway constructed; and

WHEREAS, the School Board seeks to convey to the City the Bluebird Stormwater Property for purposes of stormwater management of Bluebird Groves Parkway; and

WHEREAS, City seeks to acquire the Massachusetts Avenue Property as part of the City's expansion and realignment of Launchpad Avenue and Starry Point and in order to accommodate the stormwater generated by this expansion and realignment; and

WHEREAS, this Agreement (i) is consistent with and furthers the goals, objectives and policies of the County's Comprehensive Policy Plan, the City's Growth Management Plan, and the School Board's construction of the High School; (ii) is a public purpose and necessity; (iii) is important for the enhancement of the public transportation network and the safe and efficient flow of vehicular traffic within and including the municipal limits of the City.

NOW THEREFORE, in consideration of the premises, conditions, mutual and reciprocal obligations, and covenants contained herein; and for other good and valuable consideration, the receipt, adequacy and sufficiency of which is hereby acknowledged by and among the parties; the parties to this Agreement hereby agree as follows:

1. RECITALS. The foregoing recitals in the WHEREAS clauses are true and correct and are incorporated herein and made a part of this Agreement by reference.

2. EFFECTIVE DATE. The later of the date of approval by the Developer, City Council of the City of St. Cloud, the Board of County Commissioners of Osceola County, or the School Board of Osceola County, Florida, shall be referred to herein as the "**Effective Date.**"

3. AGREEMENTS REGARDING BLUEBIRD GROVES PARKWAY:

a. The City and the County agree that the design of Bluebird Groves Parkway shall include a right-in, right-out curb cut as approximately depicted on **Exhibit "F".**

b. The School Board shall convey to the City fee simple title to the Bluebird Stormwater Property by special warranty deed substantially in the form attached hereto as **Exhibit "K"**.

c. Developer shall convey to School Board fee simple title to the Developer Property by special warranty deed substantially in the form attached hereto as **Exhibit "H"**.

d. School Board shall convey to the City fee simple title to the 0.64 Acre Property by special warranty deed substantially in the form attached hereto as **Exhibit "J"**.

e. School Board agrees to provide a retaining wall adjacent to the High School stormwater management pond adjacent to Bluebird Groves Parkway to a height that will allow Bluebird Groves Road to be constructed without filling Bluebird Groves Parkway to match the berm of the High School pond. Determination of retaining wall height shall be made by the School Board upon the presentation of the roadway profile grade line and typical section to the School Board by the City. The School Board will be responsible for the cost of any retaining wall on the High School property. If the City or County determine that a retaining wall is required in the Bluebird Groves Parkway right of way, the cost of such a wall would be the responsibility of the City or County, as appropriate.

f. School Board agrees to diligently pursue the design of the roadway improvements within Nova Road which will include the turn and storage lanes, travel lane transitions, and roadway turnout to Bluebird Groves Parkway which design is required to complete the design and permitting of the road improvements for Bluebird Groves Parkway. The parties agree that sidewalk improvements within Nova Road are not required.

g. School Board agrees to execute all permit applications to permit the design of the stormwater management system to be located on School Board property if the County is ready to submit permit applications prior to the transfer of property from the School Board to the City. It is anticipated that a permit will be required from the South Florida Water Management District and the US Army Corps of Engineers.

h. The City and the County agree to provide the final design plans for Bluebird Groves Parkway to the School Board as expeditiously as possible after completion.

i. Upon the School Board's receipt of the final design plans for Bluebird Groves Parkway, the School Board shall prepare the legal description for the 0.64 Acre Property, which legal description will be provided to the City and added to this Agreement as **Exhibit "D"** without the need for further amendment.

4. AGREEMENTS REGARDING THE MASSACHUSETTS AVENUE PROPERTY.

b. The School Board shall convey to the City fee simple title to the Massachusetts Avenue Property by special warranty deed substantially in the form attached hereto as **Exhibit "I"** providing the City with a sketch and description of the Massachusetts Avenue Property.

c. City shall ensure that those portions of the Massachusetts Avenue Property that are contiguous to St. Cloud High School are fenced in accordance with state requirements.

d. The City shall enter into a stormwater easement with the School Board to accept stormwater from St. Cloud High School in the event that the School Board undertakes construction on the St. Cloud High School site that results in the need for additional offsite stormwater retention. The City shall only be obligated to grant the easement contemplated herein if there is available capacity in the existing stormwater system to address the additional offsite stormwater retention required. If there is not such capacity, the City and the School District will in good faith negotiate a stormwater easement and discharge agreement to accept the additional stormwater retention.

5. APPRAISALS

b. Massachusetts Avenue Property. No later than sixty (60) days after the Effective Date, the School Board shall obtain an appraisal of the Massachusetts Avenue Property **("Massachusetts Avenue Appraisal Price")**.

c. Bluebird Stormwater Property. No later than sixty (60) days after the Effective Date, the School Board shall obtain an appraisal of the Bluebird Stormwater Property **("Bluebird Stormwater Property Appraisal Price")**.

d. Developer Property. No later than sixty (60) days after the Effective Date, the School Board shall obtain an appraisal of the Developer Property. The Developer Property shall be appraised in accordance with Section 1013.14, Florida Statutes, and under the density and uses permitted in the surrounding neighborhood, assuming offsite treatment of stormwater and taking into consideration access to Bluebird Groves Parkway through a right-in, right-out curb cut. The Developer Property shall not be appraised for any other potential uses which could result in greater density or higher values such as commercial or condominium/multifamily. If the appraisal is less than $500,000.00, then only one appraisal is required, however, Developer may order its own appraisal, and the difference between the two appraisals shall be addressed in accordance with the balance of this paragraph. If the appraisal price is more than $500,000.00, then a minimum of two (2) appraisals shall be obtained for the Developer Property. If the appraised values of the two (2) appraisals deviate more than ten percent (10%) from one another, then a third appraisal

will be obtained, and the average of the two (2) appraisals closest in value shall establish the appraised value of the Developer Property. If the two (2) appraisals deviate ten percent (10%) or less from one another, then the average of the two (2) appraisals shall establish the appraised value of the Developer Property. The School Board will pay for the first appraisal, which is to be performed by an appraiser of the School Board's choice. Developer will pay for the second appraisal, which is to be performed by an appraiser of Developer's choice. If a third appraisal is required for the Developer Property, then the School Board and Developer or its assignees will split the cost of the third appraisal. The **"Developer Property Appraisal Price"** shall be the appraisal value determined in accordance with this paragraph.

e. 0.64 Acre Property. No later than forty-five (45) days after the School Board receives the survey for the 0.64 Acre Property, the School Board shall obtain an appraisal of the 0.64 Acre Property (**"0.64 Acre Property Appraisal Price"**).

f. The City may at its option obtain its own appraisal for either or any of the Massachusetts Avenue Property, the 0.64 Acre Property or the Bluebird Stormwater Property. In the event that the City elects to obtain its own appraisal, the "Appraisal Price(s)" for purposes of Section 6 below, shall be calculated as the average of the School Board's and the City's appraisals.

g. All appraisals obtained hereunder shall be completed bv a Certified Real Property Appraiser as provided by law.

6. PURCHASE PRICE.

b. City. If the City Mobility Fees are equal to or exceed the total of the Massachusetts Avenue Appraisal Price, the 0.64 Acre Property Appraisal Price, and the Bluebird Stormwater Property Appraisal Price, then City will not need to provide any further consideration for the Massachusetts Property, the 0.64 Acre Property, or the Bluebird Stormwater Property. Under no circumstances will the School Board be required to contribute to the cost of the construction of the City Portion of the Bluebird Groves Parkway.

c. School Board. The School Board shall pay to the Developer the Developer Property Appraisal Price at the time of the Developer's conveyance of the Developer Property to the School Board.

7. TITLE AND SURVEY.

b. Within fifteen (15) days of the School Board's receipt of the surveys for the 0.64 Acres, the Developer Property, the Massachusetts Avenue Property, and the Bluebird Stormwater Property, the School Board will, at its sole cost and expense, obtain an ALTA form title insurance commitment (**"Commitment"**) for the 0.64 Acres, the Developer Property, the Massachusetts Avenue Property, and the Bluebird Stormwater Property issued by Old Republic Title National Title Insurance Company through its issuing agent Marchena and Graham, P.A. The respective Commitments shall evidence that upon

execution, delivery and recordation of the deed or easement for each property, and the satisfaction of the requirements specified in Schedule B, Section I of the respective Commitment, each acquiring party shall obtain either indefeasible fee simple and marketable title to its respective property, or an easement interest, as applicable, subject to Permitted Exceptions (as defined below).

b. Within thirty (30) days of the Effective Date of this Agreement, the City and/or the School Board may obtain an ALTA survey on the Bluebird Stormwater Property and the Massachusetts Avenue Property. Within thirty (30) days of the Effective Date of this Agreement, the School Board will obtain an ALTA survey on the Developer Property. Within thirty (30) days of receipt of the final design plans for Bluebird Groves Parkway the School Board will obtain an ALTA survey on the the 0.64 Acre Property. In the event a survey reflects any easement, encroachments, rights-of-way, roads, lack of access, deficiencies, gaps or gores or hiatus between any of the parcels included within or between each property and any adjoining streets or roads, or any other adverse matters not acceptable to the party ordering the survey, such party shall notify the other party of such party's objections to the survey on or before thirty (30) days after receipt of the survey. Objections to the survey shall be treated as Title Objections pursuant to this Section 7.

c. Within thirty (30) days of a party's receipt of its Commitment or survey, such party ("**Objecting Party**") shall deliver to the other party ("**Curing Party**") its written notice of any title or survey matters which are not acceptable to the Objecting Party (the "**Title Objections**"). If the Objecting Party raises any Title Objections, then the Curing Party, at its option, may. at its expense, undertake reasonable and diligent efforts to cure and remove such Title Objections within twenty (20) days after receipt of the Title Objections ("**Cure Period**"). It being agreed that a Curing Party is not obligated or required to undertake any cure. If, after the exercise of reasonable and diligent efforts the Curing Party shall be unable to or elects not to cure the Title Objections within the Cure Period, then the Objecting Party shall have the option, prior to the expiration of the Inspection Period, to: i) elect to terminate this Agreement by furnishing written notice thereof to the Curing Party; or ii) waive such defects and accept title as it then is and without setoff. Notwithstanding any other term or provision contained in this Agreement, in all events, regardless of whether the Objecting Party has given its Title Objections, or the Curing Party elects not to cure or eliminate any Title Objections, each party shall prior to the Closing, be obligated to pay, satisfy and otherwise remove any recorded lien or mortgage or other title exception or defect that is monetary in nature. A party's failure to comply with its obligation to discharge and release its property from all monetary liens encumbering its property on or before the Closing shall be a default under this Agreement entitling the other party to exercise all rights under Section 11 below if not cured or corrected on or before Closing.

d. Any defect in title or survey which a party does not object to on or before the expiration of the Title Objection Period, together with any and all objections which such party elects to waive in writing, shall be deemed permitted exceptions ("**Permitted Exceptions**").

e. Not more than ten (10) days prior to a closing, School Board shall cause its title company to endorse its Commitment for the property being conveyed to update the effective date. If the endorsement to the Commitment includes any additional requirements in Schedule B Section I, the party owning such property ("**Owner**") must satisfy the same prior to the closing at Owner's sole cost and expense unless said new requirements were caused by the action of the other party or not caused by the action of Developer. If the endorsement to the Commitment includes any exceptions in Schedule B Section II that are not already Permitted Exceptions, the Owner must take reasonable actions necessary to delete the same prior to the closing at Owner's sole cost and expense unless said new exceptions were caused by the action of the other party, not caused by the action of Developer, or unless such party consents in writing to the same as a Permitted Exception prior to the closing. Failure to satisfy said requirements and/or delete said exceptions shall be a default under the Agreement entitling the other party to exercise all rights under Section 10 below if not cured or corrected on or before Closing.

8. INSPECTION PERIOD.

a. Bluebird Groves Parkway. The City and the School Board and their agents and consultants shall have a period commencing on the Effective Date and ending on the date that is seventy (70) days following the Effective Date (the "**Bluebird Groves Inspection Period**") to complete its own due diligence, including any on-site inspections, of the suitability and condition of the Bluebird Stormwater Property and Developer Property, respectively. The City shall have a period commencing on its receipt of the legal description of the 0.64 Acre Property ("**0.64 Acre Property Legal Description Receipt Date**") and ending on the date that is seventy (70) days following the 0.64 Acre Property Legal Description Receipt Date (the "**0.64 Acre Property Inspection Period**") to complete its own due diligence, including any on-site inspections, of the suitability and condition of the 0.64 Acre Property. The Bluebird Stormwater Property, the Developer Property and the 0.64 Acre Property are the "**Acquired Property**" based on whether it is being acquired by the City or School Board, and the conveying party is the "**Owner**". Neither party shall conduct, with respect to the Acquired Property, any invasive testing, disturb vegetation, or otherwise interfere with the operation of the Acquired Property without the prior written consent of the Owner, which shall not be unreasonably withheld or delayed. If either party's due diligence of the Acquired Property identifies conditions unacceptable to such party, such party may elect to accept the Acquired Property, or may terminate the Agreement with respect to its acquisition only, prior to the end of the Bluebird Groves Inspection Period or 0.64 Acre Property Inspection Period, as applicable, and the parties shall have no further claims against each other under this Agreement with respect to the Bluebird Stormwater Property, Developer Property, or 0.64 Acre Property only. Each party is obligated to complete its own due diligence of the suitability and conditions of the Acquired Property for such party's intended uses. For that purpose, each party grants the other party and its consultants and agents or assigns, full right of entry upon the Owner's property upon twenty-four (24) hour advance notice during the Bluebird Groves Inspection Period and 0.64 Acre Property Inspection Period and thereafter until the closing hereunder. Each party, as a condition precedent to its exercise of such right of entry, specifically agrees to

defend, indemnify and save and hold the Owner harmless from and against any loss, damage, liability, suit, claim, cost or expense (including reasonable attorneys' fees) arising from the exercise of such party's or its planners, engineers, surveyors, architects, or other agents or consultants of such right of entry and inspection, to the fullest extent permitted by law and without waiver of sovereign immunity.

b. Massachusetts Avenue Property. The City and its agents and consultants shall have a period commencing on the Effective Date and ending on the date that is seventy (70) days following the Effective Date (the **"Massachusetts Avenue Inspection Period"**) to complete its own due diligence, including any on-site inspections, of the suitability and condition of the Massachusetts Avenue Property; provided that City shall not conduct, with respect to the Massachusetts Avenue Property, any invasive testing, disturb vegetation , or otherwise interfere with the operation of the Massachusetts Avenue Property without the prior written consent of the School Board, which shall not be unreasonably withheld or delayed. City acknowledges that School Board will require compliance with the Jessica Lunsford Act and other Florida Statutes relating to access to educational facilities (**"Legal Restriction Requirements"**). If City's due diligence of the Massachusetts Avenue Property identifies conditions unacceptable to City, City may elect to accept the Massachusetts Avenue Property, or may terminate the Agreement with respect to conveyance of the Massachusetts Avenue Property only, prior to the end of the Massachusetts Avenue Inspection Period, and the parties shall have no further claim against each other under this Agreement with respect to conveyance of the Massachusetts Avenue Property only. City is obligated to complete its own due diligence of the suitability and conditions of the Massachusetts Avenue Property for City's intended uses. For that purpose, School Board grants the City and its consultants and agents or assigns, full right of entry upon the Massachusetts Avenue Property upon twenty-four (24) hour advance notice during the Inspection Period and thereafter until the closing hereunder, subject to School Board's requirements for compliance with the Legal Restriction Requirements. City, as a condition precedent to its exercise of such right of entry, specifically agrees to defend, indemnify and save and hold the School Board harmless from and against any loss, damage, liability, suit, claim, cost or expense (including reasonable attorneys' fees) arising from the exercise of City's or its planners, engineers, surveyors, architects, or other agents or consultants of such right of entry and inspection, to the fullest extent permitted by law and without waiver of sovereign immunity.

9. CLOSING.

a. Bluebird Groves Parkway Closing. Unless the City or School Board has previously terminated this Agreement with respect to the Bluebird Stormwater Property or the Developer Property, in accordance with the provisions hereinabove, the Bluebird Stormwater Property and Developer Property closing shall take place upon the date that is thirty (30) days after the end of the Bluebird Groves Inspection Period (the **"Bluebird Closing"**). At the Bluebird Closing, Developer shall execute and deliver to the School Board a special warranty deed substantially in the form of the attached **Exhibit "H"**, conveying, in accordance with all applicable laws and ordinances, indefeasible title to the Developer Property free and clear of all liens, special assessments, easement, reservation,

restrictions and encumbrances whatsoever except for the Permitted Exceptions. At the Bluebird Closing, School Board shall execute and deliver to the City a special warranty deed substantially in the form of the attached **Exhibit "K"**, conveying, in accordance with all applicable laws and ordinances, indefeasible title to the Bluebird Stormwater Property free and clear of all liens, special assessments, easement, reservation, restrictions and encumbrances whatsoever except for the Permitted Exceptions. Each party shall execute and deliver any other Bluebird Closing documents reasonably required by Developer, School Board or City (including any appropriate and customary affidavits of seller and any brokers, as applicable, as assurance against the existence of outstanding rights which could form the basis for construction liens, brokers' liens, unrecorded easements or claims of parties in possession, permitting the title company to delete the standard exceptions, including the "gap", pursuant to Florida Statutes 627.7841, as amended, and complying with the Foreign Investment in Real Property Act of 1980, as amended, and this Agreement relating to conveyance of the Developer Property and Bluebird Stormwater Property shall be closed. The Bluebird Closing shall take place as a "mail away" transaction with documents identified hereunder delivered at closing to the title agent selected by the School Board, who shall be the closing agent for the transaction.

b. 0.64 Acre Property Closing. Unless the City or School Board has previously terminated this Agreement with respect to the 0.64 Acre Property, in accordance with the provisions hereinabove, the 0.64 Acre Property closing shall take place upon the date that is thirty (30) days after the end of the 0.64 Acre Property Inspection Period (the "**0.64 Acre Property Closing**"). At the 0.64 Acre Property Closing, School Board shall execute and deliver to the City a special warranty deed substantially in the form of the attached **Exhibit "J"**, conveying, in accordance with all applicable laws and ordinances, indefeasible title to the 0.64 Acre Property free and clear of all liens, special assessments, easement, reservation, restrictions and encumbrances whatsoever except for the Permitted Exceptions. Each party shall execute and deliver any other 0.64 Acre Property Closing documents reasonably required by School Board or City (including any appropriate and customary affidavits of seller and any brokers, as applicable, as assurance against the existence of outstanding rights which could form the basis for construction liens, brokers' liens, unrecorded easements or claims of parties in possession, permitting the title company to delete the standard exceptions, including the "gap", pursuant to Florida Statutes 627.7841, as amended, and complying with the Foreign Investment in Real Property Act of 1980, as amended, and this Agreement relating to conveyance of the 0.64 Acres shall be closed. The 0.64 Acre Property Closing shall take place as a "mail away" transaction with documents identified hereunder delivered at closing to the title agent selected by the School Board, who shall be the closing agent for the transaction.

c. Massachusetts Avenue Property Closing. Unless City has previously terminated this Agreement with respect to the Massachusetts Avenue Property in accordance with the provisions hereinabove, the Massachusetts Avenue Property closing shall take place upon the date that is thirty (30) days after the expiration of the Massachusetts Avenue Property Inspection Period (as maybe extended) (the "**Massachusetts Avenue Property Closing**"). At Massachusetts Avenue Property Closing, the School Board shall execute and deliver to the City a special warranty deed substantially in the form of the attached **Exhibit "I"**,

conveying, in accordance with all applicable laws and ordinances, indefeasible title to the Massachusetts Avenue Property free and clear of all liens, special assessments, easement, reservation, restrictions and encumbrances whatsoever except for the Permitted Exceptions, and each party shall execute and deliver any other Massachusetts Avenue Property Closing documents reasonably required by either party (including any appropriate and customary affidavits of seller and any brokers, as applicable, as assurance against the existence of outstanding rights which could form the basis for construction liens, brokers' liens, unrecorded easements or claims of parties in possession, permitting the title company to delete the standard exceptions, including the "gap", pursuant to Florida Statutes 627.7841, as amended, and complying with the Foreign Investment in Real Property Act of 1980, as amended, and this Agreement with respect to the Massachusetts Avenue Property shall be closed. The relating to conveyance of Massachusetts Avenue Property Closing shall take place as a "mail away" transaction with documents identified hereunder delivered at closing to the title agent selected by the School Board, who shall be the closing agent for the transaction.

d. Each party shall pay for the cost of (i) all documentary stamp taxes required to be paid with respect to the respective deed and other instruments of conveyance, if any, for the property being conveyed to it, (ii) the cost of its Commitment and Title Policy at the standard Florida promulgated rates, including all search fees, premiums, and endorsements relating thereto, (iii) the cost of curing any of its title conditions subject to the provisions of this Agreement, (iv) the Survey ordered by such party, if applicable, and (v) all recording fees with respect to those of the closing documents which such party seeks to have recorded. Each of the respective parties shall bear its own attorneys' fees.

e. At Closing the City Manager for the City is authorized to execute any and all documents necessary to complete the transaction, and the Board Chair or Vice-Chair of the School Board is authorized to execute any and all documents necessary to complete the transaction,

10. REMEDIES. Upon the failure of any party to perform its obligations under this Agreement, the other parties' sole remedy shall be an equitable action for specific performance or injunction or action for declaratory judgment regarding the rights and obligations of the parties.

11. NOTICE. Any notice which may be permitted or required under this Agreement shall be in writing and shall be deemed to have been duly given; as of the date and time the notice is personally delivered; within three (3) calendar days after depositing the notice with the United States Postal Service, postage prepaid, by registered or certified mail with return receipt requested; within one (1) calendar day after depositing the notice with Federal Express or other overnight delivery service from which a receipt and tracking number may be obtained.

All notices shall be addressed as follows:

School Board: The School Board of Osceola County, Florida
Attn: Superintendent (or Designee)
817 Bill Beck Boulevard
Kissimmee, FL 34744-4492

With copy to:	Sarah Koren, Esq. Legal Counsel to the School Board of Osceola County, FL 817 Bill Beck Boulevard Kissimmee, FL 34744-4492
With copy to:	Anne van den Berg, Esq. Marchena & Graham, P.A. 914 Lake Baldwin Lane Suite 101 Orlando, FL 32814
City:	City of St. Cloud 1300 9th Street St. Cloud, FL 34769 Attn: Veronica Miller, City Manager
With copy to:	Daniel F. Mantzaris DeBeaubien, Simmons, Knight, Mantzaris & Neal, LLPP.O. Box 87Orlando, FL 32802
Developer:	Center Lake Properties, LLLP 102 W. Pineloch St. Suite 10 Orlando, FL 32806
With copy to:	
County:	Osceola County Attn: Don Fisher, County Manager 1 Courthouse Square, Suite 1100 Kissimmee, Florida 34741
With copy to:	Osceola County Attorney's Office 1 Courthouse Square, Suite 4200 Kissimmee, Florida 34741

By giving the other parties to this Agreement no less than fifteen (15) calendar days written notice thereof, each party to this Agreement shall have the right to change its address and specify as its new address for notice purposes any other address in the United States of America.

12. MISCELLANEOUS

a. Authority. Each party warrants and represents, with respect to itself, that neither the execution nor the performance of this Agreement requires any consent, vote or approval which has not been obtained, or at the appropriate time shall not have been given or obtained, nor shall it result in or constitute a breach or default under any indenture, contract or other commitment or restriction to which it is a party or by which it is bound. Each party

further warrants and represents, with respect to itself, that upon execution and delivery, this Agreement will be binding and enforceable against such party, or if a person is singing in a representative capacity, then the party for whom that person signs.

b. Approvals. Whenever any review or approval is required by any party, such party agrees that such review or approval will be promptly conducted and concluded. Moreover, each party agrees that it will act reasonably in exercising its review and approval functions hereunder and no approval shall be unreasonably delayed nor withheld.

c. Further Assurances. The parties hereto agree to execute any and all further instruments and documents and to take all such actions as may be reasonably required to carry out the terms of this Agreement and the transactions contemplated herein.

d. Exhibits. All exhibits referred to in this Agreement and attached hereto are incorporated herein in full and made a part of this Agreement by reference as if each exhibit were set forth in the body of this Agreement and duly executed by the parties hereto. Provided, however, that when an exhibit is comprised of a separate agreement, only the signatories to such agreement shall be deemed to be parties to that agreement and the provisions of this section shall not be construed so as extend any rights to non-signatories of such agreement.

e. No Partnership or Joint Ventures. Nothing set forth in this Agreement shall be deemed or construed as creating a legal partnership nor a legal joint venture between the parties hereto nor any other party, nor shall it cause any party to be responsible in any way for the debts and obligations of any other party.

f. No Third Party Beneficiaries. There are no third-party beneficiaries created or entitled by this Agreement. This Agreement has been entered into for the sole benefit and protection of the parties hereto and their respective successors and assigns, and no other person or entity shall have any rights or standing to enforce this Agreement or any provision hereof.

g. Attorneys' Fees. In the event of any dispute regarding, or any action to interpret or enforce, this Agreement, or any provision hereof, or any matter arising from this Agreement, each party shall be responsible for payment of its own costs, fees and expenses, including, but not limited to, witness fees, expert fees, consultant fees, attorney, paralegal and legal assistant fees, and other professional fees, whether suit be brought or not, and whether in settlement, in any declaratory action, in mediation, arbitration, bankruptcy or administrative proceeding, or at trial or on appeal.

h. Governing Law, Jurisdiction and Venue. This Agreement, and all extensions, renewals, amendments, supplements, and modifications thereto, and all questions relating to the validity, interpretation, performance, or enforcement thereof shall be governed by and construed in accordance with the laws of the State of Florida. Except for a suit in Federal court, venue for all suits to enforce this Agreement shall be in Osceola County, FL. Any legal disputes, proceedings, or actions arising out of or in connection with this Agreement

shall be brought in the Circuit Courts of Osceola County, FL, or, if appropriate, the United States District Court for the Middle District of Florida, Orlando Division.

i. Waiver. No failure of either party to exercise any power given hereunder or to insist upon strict compliance with any obligation specified herein, and no custom or practice at variance with the terms hereof, shall constitute a waiver of either party's right to demand exact compliance with the terms hereof. Nothing herein is intended to be, nor shall be deemed, an implied waiver of any legal right a party may have, and a waiver of legal rights, if any, may only be effective pursuant to an express written provision of this Agreement. Further, any such express waiver shall be limited by, and strictly construed in accordance with, the terms of the provision(s) containing the waiver.

j. No Waiver of Sovereign Immunity. Nothing in this Agreement is intended to serve, nor shall be construed, as a waiver of sovereign immunity by any agency or political subdivision to which sovereign immunity may be applicable. Nor shall this Agreement be construed to expand the limitations of liability for any agency or political subdivision to which sovereign immunity may be applicable beyond those limitations of liability set forth in Section 768.28, Florida Statutes.

k. Public Records. Public Records Act/Chapter 119 Requirements. Developer, also known as "Owner", agrees to comply with the Florida Public Records Act (Chapter 119, Florida Statutes) to the fullest extent applicable.

IF OWNER HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO OWNER'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS, 817 BILL BECK BOULEVARD, KISSIMMEE, FL 34744, PHONE: (407) 870-4600, EMAIL: PUBLICRECORDS@OSCEOLASCHOOL.NET.

l. Binding Effect. The provisions of this Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective heirs, administrators, executors, personal representatives, successors and assigns.

m. Time. Time is of the essence of this Agreement. Wherever under the terms and provisions of this Agreement something must be done within a period of days, such period shall: (i) not include the day from which such period commences; (ii) include the day upon which such period expires; (iii) expire at 5:00 p.m. local time on the day by which such thins is to be done; (iv) if six (6) days or more, be construed to mean calendar days, provided that if the final day of such period falls on a Saturday, Sunday, or Legal Holiday, such period shall be extended to the next business day; and (v) if less than six (6) days, be construed to exclude any Saturday, Sunday, or federal banking holiday.

n. Severability. This Agreement is intended to be performed in accordance with, and only to the extent permitted by, all applicable laws, ordinances, rules and regulations. If

any provision of this Agreement or the application thereof to any person or circumstance shall, for any reason and to any extent, be invalid or unenforceable, the remainder of this Agreement and the application of such provision to other persons or circumstances shall not be affected thereby but rather shall be enforced to the greatest extent permitted by law.

o. Entire Agreement. This Agreement contains the entire agreement of the parties hereto, and no representations, inducements, promises or agreements, oral or otherwise, between the parties not embodied herein shall be of any force or effect. Any amendment to this Agreement shall not be binding upon any of the parties hereto unless such amendment is in writing and executed by the parties hereto as provided for under the terms of this Agreement.

p. Counterparts. This Agreement may be executed in multiple counterparts, each of which shall constitute an original, but all of which taken together shall constitute one and the same instrument, and signature pages from one counterpart may be removed and attached to another counterpart to create a single, integrated counterpart with all necessary signatures. Delivery of an executed signature page of this Agreement by a delivery means as provided for a Notice herein, shall serve as having been duly presented and delivered.

q. Recording. This Agreement shall not be recorded in the Public Records of Osceola County, Florida.

r. Interpretation. This Agreement shall not be construed more strictly against one party than against another merely by virtue of the fact that it may have been prepared by counsel for one of the parties, it being recognized that all parties have contributed substantially and materially to the preparation hereof. The headings inserted at the beginning of each paragraph are for convenience only, and do not add to or subtract from the meaning of the contents of each paragraph.

s. **Exhibit "D"**. The Parties recognize that **Exhibit "D"** currently is only a depiction of the property purported to be represented and a legal description will be supplied and slipped in, without further amendment, upon the School Board's receipt of the survey and legal description of the 0.64 Acre Property.

[Remainder of Page Intentionally Left Blank. Signature Pages Follow.]

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement as of the date set forth below.

Signed, sealed and delivered in the presence of:

Witness:

_____

Print Name:_____
Address: _____

_____

_____

Print Name:_____
Address: _____

_____

THE SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA

By:_____
Print Name:_____
Chair

ATTEST:

By:_____
Superintendent

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization, this ____ day of _____, 20__, by _____ as _____ of the School Board of Osceola County, Florida, a public body corporate organized and existing under the Constitution and laws of the State of Florida ☐ who is personally known to me or ☐ who has produced _____ as identification.

(Seal)

_____
Notary Public - State of Florida
Print Notary Name:
My Commission Number is:

IN WITNESS WHEREOF, the parties hereto have, by their duly authorized representatives, executed this Agreement on the dates set forth below.
DATED this _____ day of _____ 2025.

"COUNTY":

ATTEST:
OSCEOLA COUNTY CLERK
OF THE BOARD

BOARD OF COUNTY COMMISSIONERS OF OSCEOLA COUNTY, FLORIDA

By:_____

By:_____
Name: _____
Chair/Vice Chair

As authorized for execution at the Board of County Commissioners meeting of:

_____

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement as of the date set forth below.

CITY OF ST. CLOUD

By: _____
Christian B. Robertson, Mayor

ATTEST:
CITY OF ST. CLOUD CITY CLERK

By: _____
Ivy Lauro, City Clerk

As authorized for execution at the City Council meeting of:

5/8/2025

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement as of the date set forth below.

Signed, sealed and delivered in the presence of:

Witnesses:

_____
Print Name:_____
Address: _____
_____

_____
Print Name:_____
Address: _____
_____

CENTER LAKE PROPERTIES, LLLP

By: Pineloch Management Corp., its General Partner

By:_____
Print Name:_____
Its:_____

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization, this ____ day of _____, 20__ , by _____ as _____ of, Pineloch Management Corp., the general partner of Center Lake Properties, LLLP, ☐ who is personally known to me or ☐ who has produced _____ as identification.

(Seal)

_____
Notary Public - State of Florida
Print Notary Name:
My Commission Number is:

EXHIBIT "A"

LEGAL DESCRIPTION
Massachusetts Avenue Property

A parcel of land being a portion of Lots 61, 68 and 77, THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION of Section 11, Township 26 South, Range 30 East, according to the plat thereof, as recorded in Plat Book B, Page 2 of the Public Records of Osceola County, Florida, being more particularly described as follows:

Commence at the Northeast corner of Tract A, SKY LAKES PHASE 1, according to the plat thereof, as recorded in Plat Book 31, Pages 125 through 132 of the Public Records of Osceola County, Florida; thence N89°49'58"W, along the North line of said Tract A, a distance of 355.08 feet to the Point of Beginning; thence continue N89°49'58"W, along said North line and the boundary of SKY LAKES PHASE 2 AND 3, according to the plat thereof, as recorded in Plat Book 32, Pages 98 through 104 of the Public Records of Osceola County, Florida, a distance of 290.00 feet to the East Right of Way line of Massachusetts Avenue; thence departing said boundary line, run N00°03'24"E, along said East Right of Way line, a distance of 979.41 feet to a point on the South line of lands described in Official Records Book 1763, Page 2018 of the Public Records of Osceola County, Florida; thence departing said East Right of Way line, run N89°55'40"E, along said South line, a distance of 290.00 feet; thence S00°03'24"W, a distance of 980.62 feet to the Point of Beginning.

Containing 284,204 square feet or 6.52 acres, more or less.

EXHIBIT "B"
LEGAL DESCRIPTION
Bluebird Stormwater Property

A parcel of land being a portion of Tract OS1, PINE GROVE RESERVE PHASE 1, according to the plat thereof, as recorded in Plat Book 34, Pages 93 through 101 of the Public Records of Osceola County, Florida, being more particularly described as follows:

Begin at the Northeast corner of Tract OS1, PINE GROVE RESERVE PHASE 1, according to the plat thereof, as recorded in Plat Book 34, Pages 93 through 101 of the Public Records of Osceola County, Florida; thence S00°05'28"E, along the East line of said Tract OS1, a distance of 231.04 feet to the Southeast corner of Tract OS1; thence departing said East line, run the following three (3) courses and distances along the South boundary line of said Tract OS1: thence N80°19'02"W, a distance of 75.20 feet; thence N86°57'26"W, a distance of 139.53 feet; thence S76°12'38"W, a distance of 36.88 feet; thence N00°19'46"W, a distance of 218.33 feet to the South Right of Way line of Bluebird Groves Parkway; thence N89°40'06"E, along said South Right of Way line, a distance of 250.17 feet to the Point of Beginning.

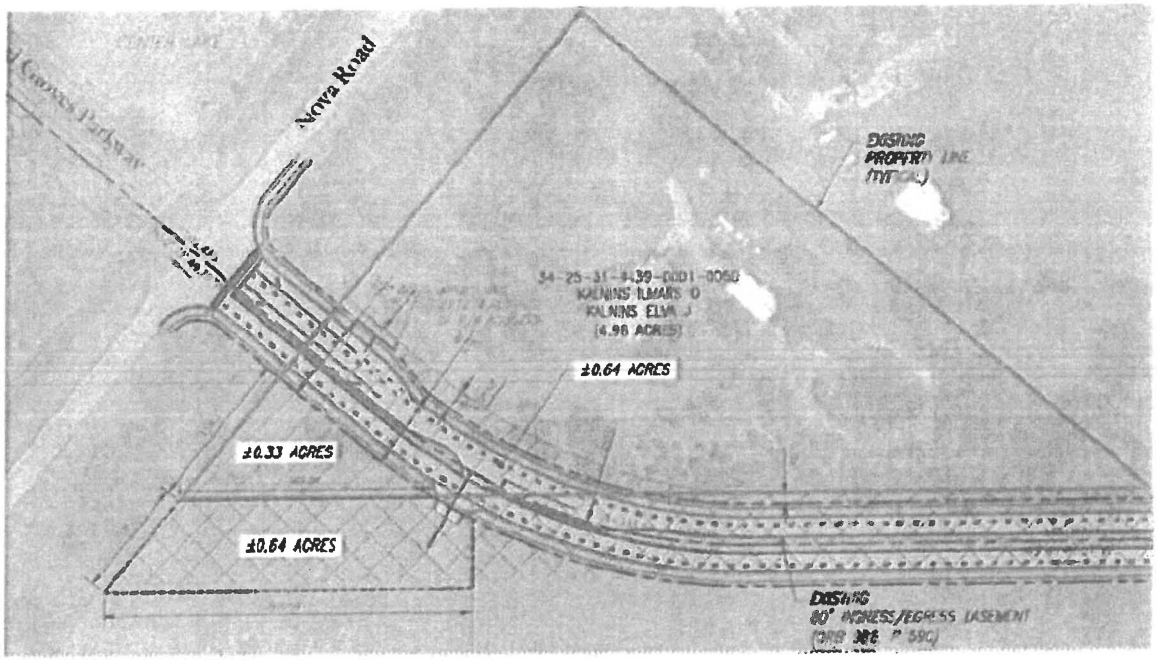
Containing 54,201 square feet or 1.24 acres, more or less.

EXHIBIT "C"
LEGAL DESCRIPTION
Developer Property

A parcel of land being a portion of Lot 5, Nova Estates, according to the map or plat thereof, as recorded in Plat Book 13, page 184 of the Public Records of Osceola County, Florida, being more particularly described as:

Beginning at the Southwest corner of said Lot 5; thence run the following two (s) courses along the South line of said Lot 5; run S 89°57'32" E., a distance of 16.67 feet; thence run N 89°40'02" E., a distance of 562.44 feet to a point on a non-tangent curve, concave to the North, having a radius of 505.00 feet and a central angle of 39°57'53"; thence run Westerly along the arc of said curve, a distance of 352.25 feet (Chord Bearing = N. 70°19'48" W., Chord = 345.15 feet); thence run N. 50°20'51" W., a distance of 119.42 feet to a point on the Easterly right of way line of Nova Road; thence run S. 39°39'01" W., along said Easterly right of way line, a distance of 254.09 feet to the Point of Beginning.

EXHIBIT "D"
LEGAL DESCRIPTION
0.64 Acre Property



The top 0.64 Acres is the portion being conveyed to the City for Bluebird Groves Parkway.

EXHIBIT "E"
Depiction of City Portion of Bluebird Groves Parkway

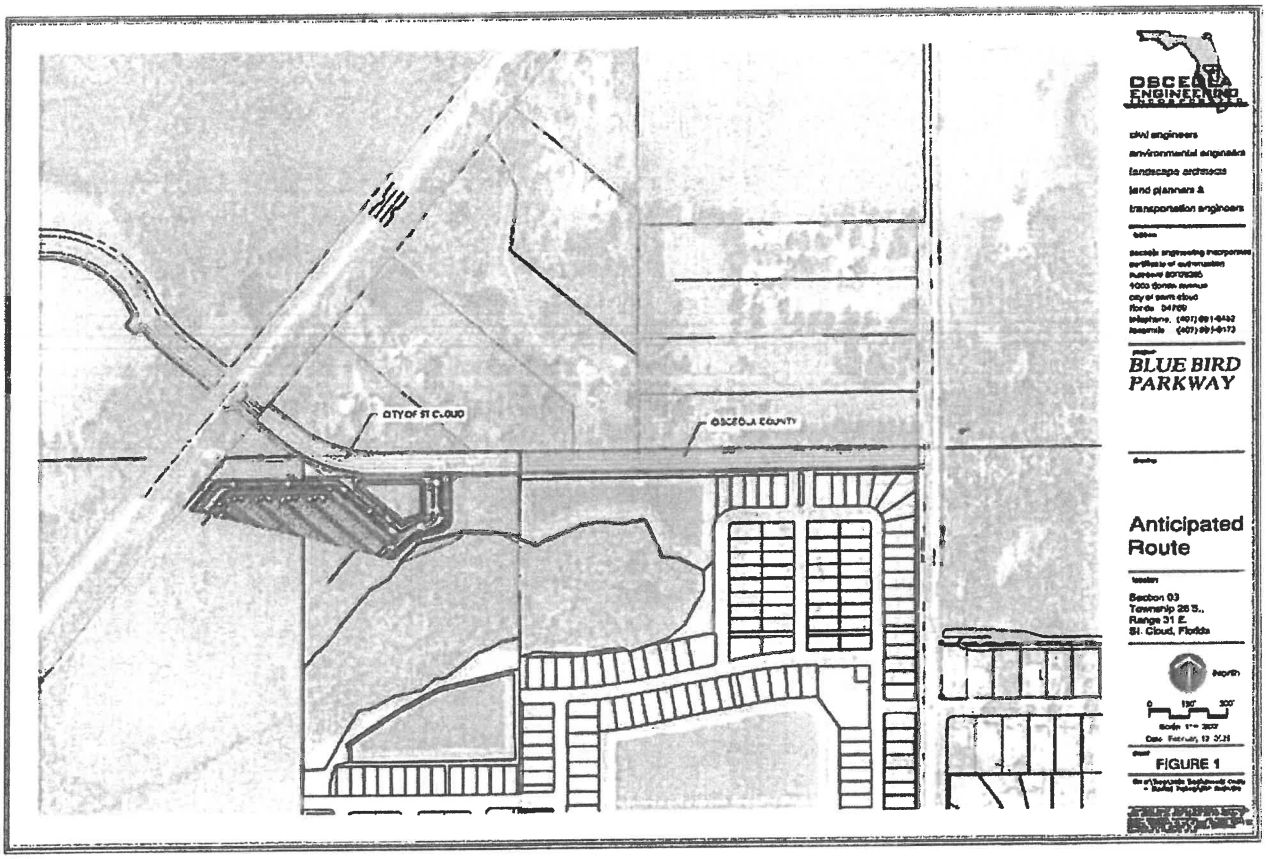


EXHIBIT "F"

Approximate Location of Curb Cut on Bluebird Groves Parkway

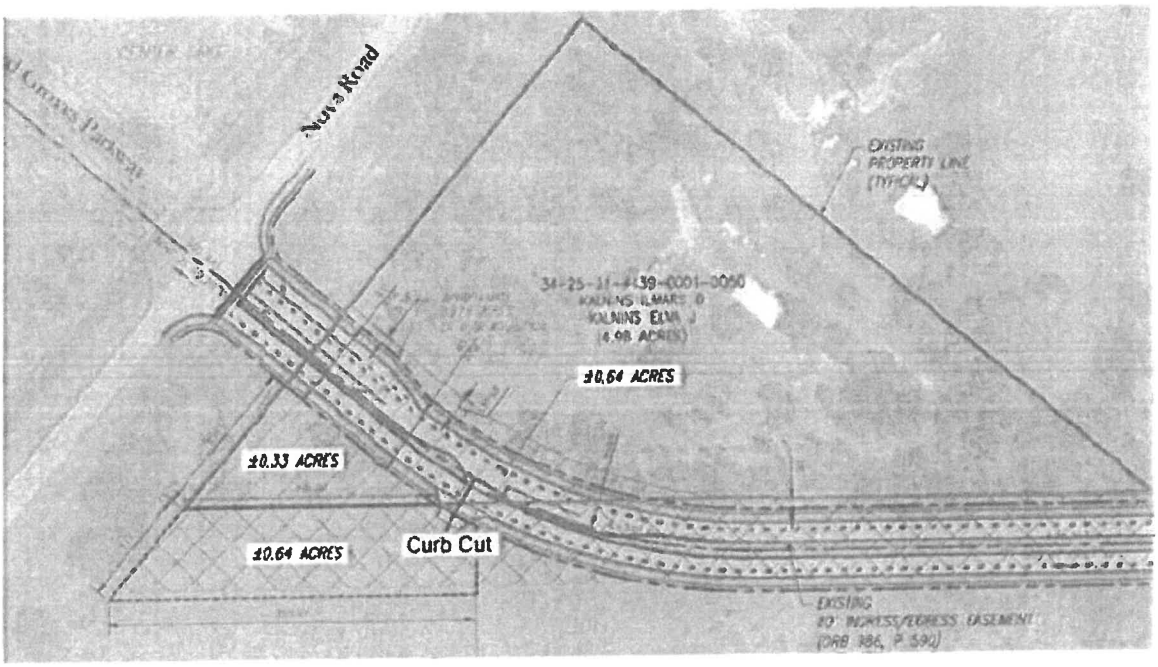


EXHIBIT "G"

Cost Estimate

Blue Bird Parkway Improvements

Osceola County Segment

General Conditions	Quantity	Units	Unit Cost	Total Cost
Mobilization	1	LS	$ 50,000.00	$ 50,000.00
Erosion Control Maintenance	1	LS	$ 25,000.00	$ 25,000.00
Silt Fence	7500	LF	$ 1.50	$ 11,250.00
Inlet Protection	10	EA	$ 300.00	$ 3,000.00
Construction Entrance	1	EA	$ 8,500.00	$ 8,500.00
SUBTOTAL				$ 97,750.00

Earthwork*	Quantity	Units	Unit Cost	Total Cost
Clear, Grub, Disc Site	2.793	AC	$ 2,350.00	$ 6,563.55
Pond Dewatering	1	LS	$ 75,000.00	$ 75,000.00
Excavation Cut to Fill	8771	CY	$ 3.69	$ 32,364.99
Move & Place Fill	8771	CY	$ 2.55	$ 22,366.05
Fine Grade Disturbed area	7300	SY	$ 1.35	$ 10,125.00
Rough Grade Pavement Box	6875	SY	$ 0.62	$ 4,262.50
Sod Pond Slopes	6875	SY	$ 3.50	$ 24,062.50
SUBTOTAL				$ 174,744.58

Paving & Concrete	Quantity	Units	Unit Cost	Total Cost
Striping & Signage	1	LS	$ 6,242.68	$ 6,242.68
12" Stabilized Subgrade (LBR 40)	8675	SY	$ 9.00	$ 78,075.00
8" Limerock Base	6455	SY	$ 23.50	$ 151,692.50
2.5" S-12.5 Asphalt	6455	SY	$ 21.65	$ 139,750.75
A Curb	2795	LF	$ 23.25	$ 64,983.75
F Curb	2975	LF	$ 22.20	$ 66,045.00
10' wide Sidewalk	1450	LF	$ 85.00	$ 123,250.00
6" Driveway	40	LF	$ 65.00	$ 2,600.00
SUBTOTAL				$ 632,639.48

Storm Improvements	Quantity	Units	Unit Cost	Total Cost
12" x 18" ERCP	32	LF	$ 65.00	$ 2,080.00
18" RCP	506	LF	$ 70.50	$ 33,673.00
24" RCP	645	LF	$ 95.50	$ 61,597.50
36" RCP	915	LF	$ 183.00	$ 167,445.00
Type J Manhole	2	EA	$ 6,245.93	$ 12,491.86
Type P-6 Inlet	10	EA	$ 7,885.00	$ 78,850.00
12"x18" MES	2	EA	$ 2,135.00	$ 4,270.00
Storm Control Structure	0	EA	$ -	$ -
24" MES	1	EA	$ 3,500.00	$ 3,500.00
30" MES	1	EA	$ 5,465.00	$ 5,465.00
Concrete Endwall	1	EA	$ 38,868.61	$ 38,868.61
SUBTOTAL				$ 410,240.97

City of St. Cloud Segment

General Conditions	Quantity	Units	Unit Cost	Total Cost
Mobilization	1	LS	$ 39,400.77	$ 39,400.77
Erosion Control Maintenance	1	LS	$ 19,700.39	$ 19,700.39
Silt Fence	5910	LF	$ 1.50	$ 8,865.17
Inlet Protection	8	EA	$ 300.00	$ 2,364.05
Construction Entrance	1	EA	$ 8,500.00	$ 8,500.00
				$ 78,830.38

Earthwork*	Quantity	Units	Unit Cost	Total Cost
Clear, Grub, Disc Site	2.801	AC	$ 2,350.00	$ 5,172.18
Pond Dewatering	1	LS	$ 99,425.49	$ 99,425.49
Excavation Cut to Fill	17557	CY	$ 3.69	$ 64,785.37
Move & Place Fill	17557	CY	$ 2.55	$ 44,770.31
Fine Grade Disturbed area	12434	SY	$ 1.35	$ 16,785.39
Rough Grade Pavement Box	5418	SY	$ 0.62	$ 3,358.92
Sod Pond Slopes	12434	SY	$ 3.50	$ 43,517.68
				$ 277,815.34

Paving & Concrete	Quantity	Units	Unit Cost	Total Cost
Striping & Signage	1	LS	$ 4,919.33	$ 4,919.33
12" Stabilized Subgrade (LBR 40)	6836	SY	$ 9.00	$ 61,524.31
8" Limerock Base	5087	SY	$ 23.50	$ 119,536.04
2.5" S-12.5 Asphalt	5087	SY	$ 21.65	$ 110,125.75
A Curb	2203	LF	$ 23.25	$ 51,208.10
F Curb	2344	LF	$ 22.20	$ 52,044.48
10' wide Sidewalk	1143	LF	$ 85.00	$ 97,122.91
6" Driveway	32	LF	$ 65.00	$ 2,048.84
				$ 498,529.86

Storm Improvements	Quantity	Units	Unit Cost	Total Cost
12" x 18" ERCP	25	LF	$ 65.00	$ 1,639.07
18" RCP	399	LF	$ 70.50	$ 28,110.88
24" RCP	508	LF	$ 95.50	$ 48,539.78
36" RCP	721	LF	$ 183.00	$ 131,946.25
Type J Manhole	2	EA	$ 6,245.93	$ 12,491.86
Type P-6 Inlet	10	EA	$ 7,885.00	$ 78,850.00
12"x18" MES	2	EA	$ 2,135.00	$ 4,270.00
Storm Control Structure	1	EA	$ 8,700.00	$ 8,700.00
24" MES	1	EA	$ 3,500.00	$ 3,500.00
30" MES	1	EA	$ 5,465.00	$ 5,465.00
Concrete Endwall	1	EA	$ 38,868.61	$ 38,868.61
				$ 362,884.45

Full Roadway

General Conditions	Total Cost
Mobilization	$ 89,400.77
Erosion Control Maintenance	$ 44,700.39
Silt Fence	$ 20,115.17
Inlet Protection	$ 5,364.05
Construction Entrance	$ 17,000.00
	$ 176,580.38

Earthwork*	Total Cost
Clear, Grub, Disc Site	$ 11,735.73
Pond Dewatering	$ 174,425.49
Excavation Cut to Fill	$ 97,150.26
Move & Place Fill	$ 67,136.36
Fine Grade Disturbed area	$ 26,910.39
Rough Grade Pavement Box	$ 7,621.42
Sod Pond Slopes	$ 67,580.18
	$ 452,559.83

Paving & Concrete	Total Cost
Striping & Signage	$ 11,162.01
12" Stabilized Subgrade (LBR 40)	$ 139,599.31
8" Limerock Base	$ 271,228.54
2.5" S-12.5 Asphalt	$ 248,876.50
A Curb	$ 116,191.85
F Curb	$ 118,089.48
10' wide Sidewalk	$ 220,372.91
6" Driveway	$ 4,648.84
	$ 1,131,169.34

Storm Improvements	Total Cost
12" x 18" ERCP	$ 3,719.07
18" RCP	$ 63,783.88
24" RCP	$ 110,137.28
36" RCP	$ 299,394.25
Type J Manhole	$ 24,983.72
Type P-6 Inlet	$ 157,700.00
12"x18" MES	$ 8,540.00
Storm Control Structure	$ 8,700.00
24" MES	$ 7,000.00
30" MES	$ 10,930.00
Concrete Endwall	$ 77,737.22
	$ 772,625.42

Land Area	Quantity	Units	Unit Cost	Total Cost	Quantity	Units	Unit Cost	Total Cost	Total Cost
Stormwater Pond Oversizing	0.766	AC	$70,000.00	$53,620.00	0.000	AC	$70,000.00	$0.00	$53,620.00
ROW Dedication	2.793	AC	$70,000.00	$195,510.00	0.00	AC	$70,000.00	$0.00	$195,510.00
SUBTOTAL				$249,130.00				$0.00	$249,130.00

***Land Purchase Agreement per acre cost

***City acreage not included in mobility fee credit calculations below.

Design & Permitting	Quantity	Units	Unit Cost	Total Cost	Quantity	Units	Unit Cost	Total Cost	Total Cost
Surveying (design level, layout & as-builts)				$42,000.00				$33,000.00	$75,000.00
Geotechnical Fees (design level & density)				$42,000.00				$33,000.00	$75,000.00
Engineering Fees (design)				$168,000.00				$132,000.00	$300,000.00
SUBTOTAL				$252,000.00				$198,000.00	$450,000.00

Permitting Application Fees	Quantity	Units	Unit Cost	Total Cost	Quantity	Units	Unit Cost	Total Cost	Total Cost
Application Fees				$5,600.00				$4,400.00	$10,000.00
CEI Services				$131,537.52				$121,755.99	$253,293.52
Performance Bond Fees				$88,652.73				$69,655.72	$158,308.45
Maintenance Bond Fees				$35,461.09				$27,862.29	$63,323.38
SUBTOTAL				$261,251.34				$223,674.00	$484,925.35

Total Construction Cost	Osceola County	$2,077,756.58	City of St. Cloud	$1,639,233.93	$3,716,990.52	
						not to exceed
Pulte Construction Management Fee	Osceola County	$103,887.83	City of St. Cloud	$81,961.70	$185,849.53	$204,500
Eligible Mobility Fee Credits	Osceola County	$2,181,644.41	City of St. Cloud	$1,721,195.63	$3,902,840.04	

* CEI Services = 10% cost of construction

* Construction Admin. = 5% cost of construction

* Perf Bond Fee = 5% bond premium (125% cost) for 1 year

* Maint. Bond Fee = 5% bond premium (25% cost) for 2 years

EXHIBIT "H"

Form of Special Warranty Deed for Developer Property

WARRANTY DEED

THIS WARRANTY DEED made as of this _____ day of _____, 2025, by **CENTER LAKE PROPERTIES, LLLP**, a Florida limited liability limited partnership, whose address is P.O. Box 568367, Orlando, Florida 32856-8367 ("**Grantor**"), to **SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA**, a public body corporate organized and existing under the Constitution and laws of the State of Florida, having an address of 817 Bill Beck Boulevard, Kissimmee, Florida 34744 (the "**Grantee**").

(Whenever used herein, the terms "Grantor" and "Grantee" shall be deemed to include the parties to this Warranty Deed and the heirs, personal representatives and assigns of individuals, and the successors and assigns of corporations, limited liability companies or partnerships. The singular shall be deemed to include the plural, and vice versa, where the context so permits.)

WITNESSETH that the Grantor, for and in consideration of the sum of Ten and No/100 Dollars ($10.00) and other consideration, receipt of which is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto Grantee, all that certain land situate in Osceola County, Florida, more particularly described in **Exhibit A** attached hereto (the "**Property**").

TOGETHER, with all tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD the Property in fee simple forever.

AND THE GRANTOR hereby covenants with Grantee that Grantor is lawfully seized of the Property in fee simple; that Grantor has good right and lawful authority to sell and convey said land; and that Grantor hereby fully warrants the title to said land and will defend the Property against the lawful claims and demands of all persons whomsoever. The conveyance is subject to taxes for the year 2025 and thereafter, and easements, reservations and restrictions of record, but this reference shall not act to reimpose the same.

IN WITNESS WHEREOF, the said Grantor has caused these presents to be executed in its name, the day and year first above written.

Signed, sealed and delivered in the presence of:	CENTER LAKE PROPERTIES, LLLP By: Pineloch Management Corp., its General Partner
_____ Print Name:_____ Address: _____ _____	By:_____ Print Name:_____ Its:_____
_____ Print Name:_____ Address: _____ _____	

(CORPORATE SEAL)

STATE OF _____
COUNTY OF _____

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization, this ____ day of _____, 20__, by _____ as _____ of, Pineloch Management Corp., the general partner of Center Lake Properties, LLLP, ☐ who is personally known to me or ☐ who has produced _____ as identification.
(SEAL)

_____
Notary Public

_____
Print Name
Commission Expires:

EXHIBIT "A"
LEGAL DESCRIPTION

A parcel of land being a portion of Lot 5, Nova Estates, according to the map or plat thereof, as recorded in Plat Book 13, page 184 of the Public Records of Osceola County, Florida, being more particularly described as:

Beginning at the Southwest corner of said Lot 5; thence run the following two (s) courses along the South line of said Lot 5; run S 89°57'32" E., a distance of 16.67 feet; thence run N 89°40'02" E., a distance of 562.44 feet to a point on a non-tangent curve, concave to the North, having a radius of 505.00 feet and a central angle of 39°57'53"; thence run Westerly along the arc of said curve, a distance of 352.25 feet (Chord Bearing = N. 70°19'48" W., Chord = 345.15 feet); thence run N. 50°20'51" W., a distance of 119.42 feet to a point on the Easterly right of way line of Nova Road; thence run S. 39°39'01" W., along said Easterly right of way line, a distance of 254.09 feet to the Point of Beginning.

EXHIBIT "I"
Form of Special Warranty Deed for Massachusetts Avenue Property

WARRANTY DEED

THIS WARRANTY DEED made as of this _____ day of _____, 2025, by **SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA**, a public body corporate organized and existing under the Constitution and laws of the State of Florida, having an address of 817 Bill Beck Boulevard, Kissimmee, Florida 34744 ("**Grantor**"), to the **CITY OF ST. CLOUD**, a municipal corporation organized and existing under the laws of the State of Florida, whose address is 1300 9th Street, St. Cloud, Florida 34769 (the "**Grantee**").

(Whenever used herein, the terms "Grantor" and "Grantee" shall be deemed to include the parties to this Warranty Deed and the heirs, personal representatives and assigns of individuals, and the successors and assigns of corporations, limited liability companies or partnerships. The singular shall be deemed to include the plural, and vice versa, where the context so permits.)

WITNESSETH that the Grantor, for and in consideration of the sum of Ten and No/100 Dollars ($10.00) and other consideration, receipt of which is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto Grantee, all that certain land situate in Osceola County, Florida, more particularly described in **Exhibit A** attached hereto (the "**Property**").

TOGETHER, with all tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD the Property in fee simple forever.

AND THE GRANTOR hereby covenants with Grantee that Grantor is lawfully seized of the Property in fee simple; that Grantor has good right and lawful authority to sell and convey said land; and that Grantor hereby fully warrants the title to said land and will defend the Property against the lawful claims and demands of all persons whomsoever. The conveyance is subject to taxes for the year 2025 and thereafter, and easements, reservations and restrictions of record, but this reference shall not act to reimpose the same.

IN WITNESS WHEREOF, the said Grantor has caused these presents to be executed in its name, the day and year first above written.

Signed, Sealed and Delivered
in the presence of:

GRANTOR:

THE SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA, a public body corporate organized and existing under the Constitution and laws of the State of Florida

WITNESS: _____

By: _____

Print Name: _____

Name: _____, Chair

Attest: _____
Mark Shanoff, Ed. D, Superintendent

WITNESS: _____

Print Name: _____

(CORPORATE SEAL)

STATE OF _____
COUNTY OF _____

The forgoing instrument was acknowledged before me this _____ day of _____ 20__ by _____as_____ of **THE SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA, a public body corporate organized and existing under the Constitution and laws of the State of Florida,** on behalf of the corporation by means of □physical presence or □ online notarization. She/He personally appeared before me, is personally known to me or has produced _____ as identification and who did (did not) take an oath.

(SEAL)

_____
Notary Public

_____
Print Name
Commission Expires:

EXHIBIT "A"
LEGAL DESCRIPTION

A parcel of land being a portion of Lots 61, 68 and 77, THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION of Section 11, Township 26 South, Range 30 East, according to the plat thereof, as recorded in Plat Book B, Page 2 of the Public Records of Osceola County, Florida, being more particularly described as follows:

Commence at the Northeast corner of Tract A, SKY LAKES PHASE 1, according to the plat thereof, as recorded in Plat Book 31, Pages 125 through 132 of the Public Records of Osceola County, Florida; thence N89°49'58"W, along the North line of said Tract A, a distance of 355.08 feet to the Point of Beginning; thence continue N89°49'58"W, along said North line and the boundary of SKY LAKES PHASE 2 AND 3, according to the plat thereof, as recorded in Plat Book 32, Pages 98 through 104 of the Public Records of Osceola County, Florida, a distance of 290.00 feet to the East Right of Way line of Massachusetts Avenue; thence departing said boundary line, run N00°03'24"E, along said East Right of Way line, a distance of 979.41 feet to a point on the South line of lands described in Official Records Book 1763, Page 2018 of the Public Records of Osceola County, Florida; thence departing said East Right of Way line, run N89°55'40"E, along said South line, a distance of 290.00 feet; thence S00°03'24"W, a distance of 980.62 feet to the Point of Beginning.

Containing 284,204 square feet or 6.52 acres, more or less.

EXHIBIT "J"
Form of Special Warranty Deed for 0.64 Acre Property

WARRANTY DEED

THIS WARRANTY DEED made as of this _____ day of _____, 2025, by **SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA**, a public body corporate organized and existing under the Constitution and laws of the State of Florida, having an address of 817 Bill Beck Boulevard, Kissimmee, Florida 34744 ("**Grantor**"), to the **CITY OF ST. CLOUD**, a municipal corporation organized and existing under the laws of the State of Florida.

(Whenever used herein, the terms "Grantor" and "Grantee" shall be deemed to include the parties to this Warranty Deed and the heirs, personal representatives and assigns of individuals, and the successors and assigns of corporations, limited liability companies or partnerships. The singular shall be deemed to include the plural, and vice versa, where the context so permits.)

WITNESSETH that the Grantor, for and in consideration of the sum of Ten and No/100 Dollars ($10.00) and other consideration, receipt of which is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto Grantee, all that certain land situate in Osceola County, Florida, more particularly described in **Exhibit A** attached hereto (the "**Property**").

TOGETHER, with all tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD the Property in fee simple forever.

AND THE GRANTOR hereby covenants with Grantee that Grantor is lawfully seized of the Property in fee simple; that Grantor has good right and lawful authority to sell and convey said land; and that Grantor hereby fully warrants the title to said land and will defend the Property against the lawful claims and demands of all persons whomsoever. The conveyance is subject to taxes for the year 2025 and thereafter, and easements, reservations and restrictions of record, but this reference shall not act to reimpose the same.

IN WITNESS WHEREOF, the said Grantor has caused these presents to be executed in its name, the day and year first above written.

Signed, Sealed and Delivered
in the presence of:

GRANTOR:

THE SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA, a public body corporate organized and existing under the Constitution and laws of the State of Florida

WITNESS: _____

By: _____

Print Name: _____

Name: _____, Chair

Attest: _____
Mark Shanoff, Ed. D, Superintendent

WITNESS: _____

Print Name: _____

(CORPORATE SEAL)

STATE OF _____
COUNTY OF _____

The forgoing instrument was acknowledged before me this _____ day of _____ 20__ by _____as_____ of **THE SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA, a public body corporate organized and existing under the Constitution and laws of the State of Florida**, on behalf of the corporation by means of □physical presence or □ online notarization. She/He personally appeared before me, is personally known to me or has produced _____ as identification and who did (did not) take an oath.

(SEAL)

_____
Notary Public

_____
Print Name
Commission Expires:

EXHIBIT "A"
LEGAL DESCRIPTION

EXHIBIT "K"
Form of Special Warranty Deed for Bluebird Stormwater Property

WARRANTY DEED

THIS WARRANTY DEED made as of this _____ day of _____, 2025, by **SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA**, a public body corporate organized and existing under the Constitution and laws of the State of Florida, having an address of 817 Bill Beck Boulevard, Kissimmee, Florida 34744 ("**Grantor**"), to the **CITY OF ST. CLOUD**, a municipal corporation organized and existing under the laws of the State of Florida.

(Whenever used herein, the terms "Grantor" and "Grantee" shall be deemed to include the parties to this Warranty Deed and the heirs, personal representatives and assigns of individuals, and the successors and assigns of corporations, limited liability companies or partnerships. The singular shall be deemed to include the plural, and vice versa, where the context so permits.)

WITNESSETH that the Grantor, for and in consideration of the sum of Ten and No/100 Dollars ($10.00) and other consideration, receipt of which is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto Grantee, all that certain land situate in Osceola County, Florida, more particularly described in **Exhibit A** attached hereto (the "**Property**").

TOGETHER, with all tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD the Property in fee simple forever.

AND THE GRANTOR hereby covenants with Grantee that Grantor is lawfully seized of the Property in fee simple; that Grantor has good right and lawful authority to sell and convey said land; and that Grantor hereby fully warrants the title to said land and will defend the Property against the lawful claims and demands of all persons whomsoever. The conveyance is subject to taxes for the year 2025 and thereafter, and easements, reservations and restrictions of record, but this reference shall not act to reimpose the same.

IN WITNESS WHEREOF, the said Grantor has caused these presents to be executed in its name, the day and year first above written.

Signed, Sealed and Delivered
in the presence of:

GRANTOR:

THE SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA, a public body corporate organized and existing under the Constitution and laws of the State of Florida

WITNESS: _____

Print Name: _____

By: _____

Name: _____, Chair

Attest: _____
Mark Shanoff, Ed. D, Superintendent

WITNESS: _____

Print Name: _____

(CORPORATE SEAL)

STATE OF _____
COUNTY OF _____

The forgoing instrument was acknowledged before me this _____ day of _____ 20__ by _____ as _____ of **THE SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA, a public body corporate organized and existing under the Constitution and laws of the State of Florida**, on behalf of the corporation by means of □physical presence or □ online notarization. She/He personally appeared before me, is personally known to me or has produced _____ as identification and who did (did not) take an oath.

(SEAL)

_____
Notary Public

_____
Print Name
Commission Expires:

EXHIBIT "A"
LEGAL DESCRIPTION

A parcel of land being a portion of Tract OS1, PINE GROVE RESERVE PHASE 1, according to the plat thereof, as recorded in Plat Book 34, Pages 93 through 101 of the Public Records of Osceola County, Florida, being more particularly described as follows:

Begin at the Northeast corner of Tract OS1, PINE GROVE RESERVE PHASE 1, according to the plat thereof, as recorded in Plat Book 34, Pages 93 through 101 of the Public Records of Osceola County, Florida; thence S00°05'28"E, along the East line of said Tract OS1, a distance of 231.04 feet to the Southeast corner of Tract OS1; thence departing said East line, run the following three (3) courses and distances along the South boundary line of said Tract OS1: thence N80°19'02"W, a distance of 75.20 feet; thence N86°57'26"W, a distance of 139.53 feet; thence S76°12'38"W, a distance of 36.88 feet; thence N00°19'46"W, a distance of 218.33 feet to the South Right of Way line of Bluebird Groves Parkway; thence N89°40'06"E, along said South Right of Way line, a distance of 250.17 feet to the Point of Beginning.

Containing 54,201 square feet or 1.24 acres, more or less.

ORIGINAL

RESOLUTION NUMBER 2025-037R

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, ENTERING INTO AN AGREEMENT WITH THE SCHOOL BOARD OF OSCEOLA COUNTY, OSCEOLA COUNTY AND CENTER LAKE PROPERTIES, LLLP, FOR CONVEYANCE OF PROPERTY AND RIGHT-OF-WAY FOR BLUEBIRD GROVES PARKWAY, A FRAMEWORK ROAD, AND CONVEYANCE OF RIGHT-OF-WAY FOR THE MASSACHUSETTS AVENUE EXTENSION, FOR ENTERING INTO A FUTURE TRI-PARTY AGREEMENT TO CONSTRUCT BLUEBIRD GROVES PARKWAY; AUTHORIZING THE MAYOR TO EXECUTE THIS AGREEMENT AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, in Section 3 of the agreement, the City of St. Cloud and Osceola County agree to design and construct Bluebird Groves Parkway, a framework roadway as set forth in Exhibit "E" of the agreement, through a future Tri-Party Transportation Agreement using Mobility Fees; and

WHEREAS, in Section 4 of the agreement, the School Board of Osceola County agrees to convey to the City of St. Cloud property Massachusetts Avenue as set forth in Exhibit "I" of the agreement; and

WHEREAS, in Section 3 of the agreement, the School Board of Osceola County agrees to convey to the City of St. Cloud property for Bluebird Groves Parkway as set forth in Exhibit "J" of the agreement; and

WHEREAS, in Section 3 of the agreement, the School Board of Osceola County agrees to convey to the City of St. Cloud property for the Bluebird Stormwater Pond as set forth in Exhibit "K" of the agreement; and

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, as follows:

SECTION I. The City Council of the City of St. Cloud hereby approves an agreement with the School Board of Osceola County for the Bluebird Groves Memorandum of Understanding as set forth in Exhibit "A" of the agreement.

SECTION II. The City Council of the City of St. Cloud hereby approves an agreement with the Developer for the conveyance of right-of-way in exchange for entering into a mobility fee credit agreement.

SECTION III. The City Council of the City of St. Cloud, hereby approves and authorizes the Mayor to execute the Agreement set forth in Exhibit "A" hereto.

SECTION IV. This resolution shall take effect immediately upon adoption by the City Council.

PASSED AND ADOPTED this 8th day of May 2025.

CITY OF ST. CLOUD

Christian B. Robertson, Mayor

ATTEST:

Ivy Llauro, City Clerk

LEGAL IN FORM AND VALID IF ADOPTED.
deBeaubien, Simmons, Knight, Mantzaris & Neal, LLP

Daniel F. Mantzaris, City Attorney

Pursuant to Section 695.26 (3) (f), this instrument is exempt from Chapter 695, F.S

BLUEBIRD GROVES PARKWAY MEMORANDUM OF UNDERSTANDING

THIS BLUEBIRD GROVES PARKWAY MEMORANDUM OF UNDERSTANDING ("**Agreement**") is made as of the last date signed below, by and between the **SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA**, a public body corporate organized and existing under the Constitution and laws of the State of Florida, ("**School Board**"), the **CITY OF ST. CLOUD**, a municipal corporation organized and existing under the laws of the State of Florida , ("**City**"), **CENTER LAKE PROPERTIES, LLLP**, a Florida limited liability limited partnership ("**Developer**"), and the **BOARD OF COUNTY COMMISSIONERS OF OSCEOLA COUNTY, FLORIDA** ("**County**"), a political subdivision of the State of Florida .

W I T N E S S E T H:

WHEREAS, School Board owns that certain real property, consisting of approximately 6.5 acres, more or less, located in the City of St. Cloud, Florida, as more particularly described or depicted on **Exhibit "A"** attached hereto and by reference made a part hereof (the "**Massachusetts Avenue Property**"); and

WHEREAS, School Board owns that certain real property, consisting of approximately 1.24 acres, more or less, located in the City of St. Cloud, Florida, as more particularly described or depicted on **Exhibit "B"** attached hereto and by reference made a part hereof (the "**Bluebird Stormwater Property**"); and

WHEREAS, School Board is constructing a high school (the "**High School**") scheduled to open in May 2026 and bus depot on property owned by the School Board that currently includes the Bluebird Stormwater Property; and

WHEREAS, Developer owns that certain real property, consisting of approximately 0.97 acres, more or less, located in the City of St. Cloud, Florida, as more particularly described or depicted on **Exhibit "C"** (the "**Developer Property**");

WHEREAS, School Board desires to acquire the Developer Property in order to convey 0.64 acres of it (the "**0.64 Acre Property**"), as more particularly described or depicted on **Exhibit "D"** attached hereto and by reference made a part hereof, to the City for construction of Bluebird Groves Parkway; and

WHEREAS, the County is the record owner of a portion of the property upon which Bluebird Groves Parkway will be constructed; and

WHEREAS, the City and the County, are proceeding with design and construction of Bluebird Groves Parkway, allocating responsibility for the design and construction such that the City is responsible for the design and construction of that portion of Bluebird Groves Parkway from Nova Road to the western edge of the Amelia Groves development ("**City Portion of Bluebird Groves Parkway**"), and the County is responsible for the design and construction of

Bluebird Groves Parkway from the western edge of the Amelia Groves development to Pine Groves Road, as approximately depicted in **Exhibit "E"**; and

WHEREAS, the design for Bluebird Groves Parkway shall include a right- in, right-out curb cut as approximately depicted in **Exhibit "F"**.

WHEREAS, the City and the County have agreed that the City Portion of Bluebird Groves Parkway will be completed before May 1, 2026); and

WHEREAS, the City and the County will pay for the design and construction of Bluebird Groves Parkway through the issuance of mobility fee credits, which estimated cost is reflected in **Exhibit "G"**; and

WHEREAS, the City portion of the mobility fee credits to be issued in connection with the City Portion of Bluebird Groves Parkway is estimated to be $1,721,195.63 (the "**City Mobility Fee Credits**"); and

WHEREAS, the construction of Bluebird Groves Parkway will require the discharge of the stormwater from the City Portion of Bluebird Groves Parkway onto the Bluebird Stormwater Property; and

WHEREAS, the County will convey Bluebird Groves Parkway to the City pursuant to a separate agreement; and

WHEREAS, City seeks to acquire the 0.64 Acre Property from the School Board in order to have Bluebird Groves Parkway constructed; and

WHEREAS, the School Board seeks to convey to the City the Bluebird Stormwater Property for purposes of stormwater management of Bluebird Groves Parkway; and

WHEREAS, City seeks to acquire the Massachusetts Avenue Property as part of the City's expansion and realignment of Launchpad Avenue and Starry Point and in order to accommodate the stormwater generated by this expansion and realignment; and

WHEREAS, this Agreement (i) is consistent with and furthers the goals, objectives and policies of the County's Comprehensive Policy Plan, the City's Growth Management Plan, and the School Board's construction of the High School; (ii) is a public purpose and necessity; (iii) is important for the enhancement of the public transportation network and the safe and efficient flow of vehicular traffic within and including the municipal limits of the City.

NOW THEREFORE, in consideration of the premises, conditions, mutual and reciprocal obligations, and covenants contained herein; and for other good and valuable consideration, the receipt, adequacy and sufficiency of which is hereby acknowledged by and among the parties; the parties to this Agreement hereby agree as follows:

1. RECITALS. The foregoing recitals in the WHEREAS clauses are true and correct and are incorporated herein and made a part of this Agreement by reference.

2. EFFECTIVE DATE. The later of the date of approval by the Developer, City Council of the City of St. Cloud, the Board of County Commissioners of Osceola County, or the School Board of Osceola County, Florida, shall be referred to herein as the "**Effective Date.**"

3. AGREEMENTS REGARDING BLUEBIRD GROVES PARKWAY:

a. The City and the County agree that the design of Bluebird Groves Parkway shall include a right-in, right-out curb cut as approximately depicted on **Exhibit "F".**

b. The School Board shall convey to the City fee simple title to the Bluebird Stormwater Property by special warranty deed substantially in the form attached hereto as **Exhibit "K"**,

c. Developer shall convey to School Board fee simple title to the Developer Property by special warranty deed substantially in the form attached hereto as **Exhibit "H"**.

d. School Board shall convey to the City fee simple title to the 0.64 Acre Property by special warranty deed substantially in the form attached hereto as **Exhibit "J"**,

e. School Board agrees to provide a retaining wall adjacent to the High School stormwater management pond adjacent to Bluebird Groves Parkway to a height that will allow Bluebird Groves Road to be constructed without filling Bluebird Groves Parkway to match the berm of the High School pond. Determination of retaining wall height shall be made by the School Board upon the presentation of the roadway profile grade line and typical section to the School Board by the City. The School Board will be responsible for the cost of any retaining wall on the High School property. If the City or County determine that a retaining wall is required in the Bluebird Groves Parkway right of way, the cost of such a wall would be the responsibility of the City or County, as appropriate.

f. School Board agrees to diligently pursue the design of the roadway improvements within Nova Road which will include the turn and storage lanes, travel lane transitions, and roadway turnout to Bluebird Groves Parkway which design is required to complete the design and permitting of the road improvements for Bluebird Groves Parkway. The parties agree that sidewalk improvements within Nova Road are not required.

g. School Board agrees to execute all permit applications to permit the design of the stormwater management system to be located on School Board property if the County is ready to submit permit applications prior to the transfer of property from the School Board to the City. It is anticipated that a permit will be required from the South Florida Water Management District and the US Army Corps of Engineers.

h. The City and the County agree to provide the final design plans for Bluebird Groves Parkway to the School Board as expeditiously as possible after completion.

i. Upon the School Board's receipt of the final design plans for Bluebird Groves Parkway, the School Board shall prepare the legal description for the 0.64 Acre Property, which legal description will be provided to the City and added to this Agreement as **Exhibit "D"** without the need for further amendment.

4. AGREEMENTS REGARDING THE MASSACHUSETTS AVENUE PROPERTY.

b. The School Board shall convey to the City fee simple title to the Massachusetts Avenue Property by special warranty deed substantially in the form attached hereto as **Exhibit "I"** providing the City with a sketch and description of the Massachusetts Avenue Property.

c. City shall ensure that those portions of the Massachusetts Avenue Property that are contiguous to St. Cloud High School are fenced in accordance with state requirements.

d. The City shall enter into a stormwater easement with the School Board to accept stormwater from St. Cloud High School in the event that the School Board undertakes construction on the St. Cloud High School site that results in the need for additional offsite stormwater retention. The City shall only be obligated to grant the easement contemplated herein if there is available capacity in the existing stormwater system to address the additional offsite stormwater retention required. If there is not such capacity, the City and the School District will in good faith negotiate a stormwater easement and discharge agreement to accept the additional stormwater retention.

5. APPRAISALS

b. Massachusetts Avenue Property. No later than sixty (60) days after the Effective Date, the School Board shall obtain an appraisal of the Massachusetts Avenue Property **("Massachusetts Avenue Appraisal Price")**.

c. Bluebird Stormwater Property. No later than sixty (60) days after the Effective Date, the School Board shall obtain an appraisal of the Bluebird Stormwater Property **("Bluebird Stormwater Property Appraisal Price")**.

d. Developer Property. No later than sixty (60) days after the Effective Date, the School Board shall obtain an appraisal of the Developer Property. The Developer Property shall be appraised in accordance with Section 1013.14, Florida Statutes, and under the density and uses permitted in the surrounding neighborhood, assuming offsite treatment of stormwater and taking into consideration access to Bluebird Groves Parkway through a right-in, right-out curb cut. The Developer Property shall not be appraised for any other potential uses which could result in greater density or higher values such as commercial or condominium/multifamily. If the appraisal is less than $500,000.00, then only one appraisal is required, however, Developer may order its own appraisal, and the difference between the two appraisals shall be addressed in accordance with the balance of this paragraph. If the appraisal price is more than $500,000.00, then a minimum of two (2) appraisals shall be obtained for the Developer Property. If the appraised values of the two (2) appraisals deviate more than ten percent (10%) from one another, then a third appraisal

will be obtained, and the average of the two (2) appraisals closest in value shall establish the appraised value of the Developer Property. If the two (2) appraisals deviate ten percent (10%) or less from one another, then the average of the two (2) appraisals shall establish the appraised value of the Developer Property. The School Board will pay for the first appraisal, which is to be performed by an appraiser of the School Board's choice. Developer will pay for the second appraisal, which is to be performed by an appraiser of Developer's choice. If a third appraisal is required for the Developer Property, then the School Board and Developer or its assignees will split the cost of the third appraisal. The **"Developer Property Appraisal Price"** shall be the appraisal value determined in accordance with this paragraph.

e. 0.64 Acre Property. No later than forty-five (45) days after the School Board receives the survey for the 0.64 Acre Property, the School Board shall obtain an appraisal of the 0.64 Acre Property **("0.64 Acre Property Appraisal Price")**.

f. The City may at its option obtain its own appraisal for either or any of the Massachusetts Avenue Property, the 0.64 Acre Property or the Bluebird Stormwater Property. In the event that the City elects to obtain its own appraisal, the "Appraisal Price(s)" for purposes of Section 6 below, shall be calculated as the average of the School Board's and the City's appraisals.

g. All appraisals obtained hereunder shall be completed bv a Certified Real Property Appraiser as provided by law.

6. PURCHASE PRICE.

b. City. If the City Mobility Fees are equal to or exceed the total of the Massachusetts Avenue Appraisal Price, the 0.64 Acre Property Appraisal Price, and the Bluebird Stormwater Property Appraisal Price, then City will not need to provide any further consideration for the Massachusetts Property, the 0.64 Acre Property, or the Bluebird Stormwater Property. Under no circumstances will the School Board be required to contribute to the cost of the construction of the City Portion of the Bluebird Groves Parkway.

c. School Board. The School Board shall pay to the Developer the Developer Property Appraisal Price at the time of the Developer's conveyance of the Developer Property to the School Board.

7. TITLE AND SURVEY.

b. Within fifteen (15) days of the School Board's receipt of the surveys for the 0.64 Acres, the Developer Property, the Massachusetts Avenue Property, and the Bluebird Stormwater Property, the School Board will, at its sole cost and expense, obtain an ALTA form title insurance commitment (**"Commitment"**) for the 0.64 Acres, the Developer Property, the Massachusetts Avenue Property, and the Bluebird Stormwater Property issued by Old Republic Title National Title Insurance Company through its issuing agent Marchena and Graham, P.A. The respective Commitments shall evidence that upon

execution, delivery and recordation of the deed or easement for each property, and the satisfaction of the requirements specified in Schedule B, Section I of the respective Commitment, each acquiring party shall obtain either indefeasible fee simple and marketable title to its respective property, or an easement interest, as applicable, subject to Permitted Exceptions (as defined below).

b. Within thirty (30) days of the Effective Date of this Agreement, the City and/or the School Board may obtain an ALTA survey on the Bluebird Stormwater Property and the Massachusetts Avenue Property. Within thirty (30) days of the Effective Date of this Agreement, the School Board will obtain an ALTA survey on the Developer Property. Within thirty (30) days of receipt of the final design plans for Bluebird Groves Parkway the School Board will obtain an ALTA survey on the the 0.64 Acre Property. In the event a survey reflects any easement, encroachments, rights-of-way, roads, lack of access, deficiencies, gaps or gores or hiatus between any of the parcels included within or between each property and any adjoining streets or roads, or any other adverse matters not acceptable to the party ordering the survey, such party shall notify the other party of such party's objections to the survey on or before thirty (30) days after receipt of the survey. Objections to the survey shall be treated as Title Objections pursuant to this Section 7.

c. Within thirty (30) days of a party's receipt of its Commitment or survey, such party ("**Objecting Party**") shall deliver to the other party ("**Curing Party**") its written notice of any title or survey matters which are not acceptable to the Objecting Party (the "**Title Objections**"). If the Objecting Party raises any Title Objections, then the Curing Party, at its option, may. at its expense, undertake reasonable and diligent efforts to cure and remove such Title Objections within twenty (20) days after receipt of the Title Objections ("**Cure Period**"). It being agreed that a Curing Party is not obligated or required to undertake any cure. If, after the exercise of reasonable and diligent efforts the Curing Party shall be unable to or elects not to cure the Title Objections within the Cure Period, then the Objecting Party shall have the option, prior to the expiration of the Inspection Period, to: i) elect to terminate this Agreement by furnishing written notice thereof to the Curing Party; or ii) waive such defects and accept title as it then is and without setoff. Notwithstanding any other term or provision contained in this Agreement, in all events, regardless of whether the Objecting Party has given its Title Objections, or the Curing Party elects not to cure or eliminate any Title Objections, each party shall prior to the Closing, be obligated to pay, satisfy and otherwise remove any recorded lien or mortgage or other title exception or defect that is monetary in nature. A party's failure to comply with its obligation to discharge and release its property from all monetary liens encumbering its property on or before the Closing shall be a default under this Agreement entitling the other party to exercise all rights under Section 11 below if not cured or corrected on or before Closing.

d. Any defect in title or survey which a party does not object to on or before the expiration of the Title Objection Period, together with any and all objections which such party elects to waive in writing, shall be deemed permitted exceptions ("**Permitted Exceptions**").

e. Not more than ten (10) days prior to a closing, School Board shall cause its title company to endorse its Commitment for the property being conveyed to update the effective date. If the endorsement to the Commitment includes any additional requirements in Schedule B Section I, the party owning such property ("**Owner**") must satisfy the same prior to the closing at Owner's sole cost and expense unless said new requirements were caused by the action of the other party or not caused by the action of Developer. If the endorsement to the Commitment includes any exceptions in Schedule B Section II that are not already Permitted Exceptions, the Owner must take reasonable actions necessary to delete the same prior to the closing at Owner's sole cost and expense unless said new exceptions were caused by the action of the other party, not caused by the action of Developer, or unless such party consents in writing to the same as a Permitted Exception prior to the closing. Failure to satisfy said requirements and/or delete said exceptions shall be a default under the Agreement entitling the other party to exercise all rights under Section 10 below if not cured or corrected on or before Closing.

8. INSPECTION PERIOD.

a. Bluebird Groves Parkway. The City and the School Board and their agents and consultants shall have a period commencing on the Effective Date and ending on the date that is seventy (70) days following the Effective Date (the "**Bluebird Groves Inspection Period**") to complete its own due diligence, including any on-site inspections, of the suitability and condition of the Bluebird Stormwater Property and Developer Property, respectively. The City shall have a period commencing on its receipt of the legal description of the 0.64 Acre Property ("**0.64 Acre Property Legal Description Receipt Date**") and ending on the date that is seventy (70) days following the 0.64 Acre Property Legal Description Receipt Date (the "**0.64 Acre Property Inspection Period**") to complete its own due diligence, including any on-site inspections, of the suitability and condition of the 0.64 Acre Property. The Bluebird Stormwater Property, the Developer Property and the 0.64 Acre Property are the **"Acquired Property"** based on whether it is being acquired by the City or School Board, and the conveying party is the "**Owner**". Neither party shall conduct, with respect to the Acquired Property, any invasive testing, disturb vegetation, or otherwise interfere with the operation of the Acquired Property without the prior written consent of the Owner, which shall not be unreasonably withheld or delayed. If either party's due diligence of the Acquired Property identifies conditions unacceptable to such party, such party may elect to accept the Acquired Property, or may terminate the Agreement with respect to its acquisition only, prior to the end of the Bluebird Groves Inspection Period or 0.64 Acre Property Inspection Period, as applicable, and the parties shall have no further claims against each other under this Agreement with respect to the Bluebird Stormwater Property, Developer Property, or 0.64 Acre Property only. Each party is obligated to complete its own due diligence of the suitability and conditions of the Acquired Property for such party's intended uses. For that purpose, each party grants the other party and its consultants and agents or assigns, full right of entry upon the Owner's property upon twenty-four (24) hour advance notice during the Bluebird Groves Inspection Period and 0.64 Acre Property Inspection Period and thereafter until the closing hereunder. Each party, as a condition precedent to its exercise of such right of entry, specifically agrees to

defend, indemnify and save and hold the Owner harmless from and against any loss, damage, liability, suit, claim, cost or expense (including reasonable attorneys' fees) arising from the exercise of such party's or its planners, engineers, surveyors, architects, or other agents or consultants of such right of entry and inspection, to the fullest extent permitted by law and without waiver of sovereign immunity.

b. Massachusetts Avenue Property. The City and its agents and consultants shall have a period commencing on the Effective Date and ending on the date that is seventy (70) days following the Effective Date (the **"Massachusetts Avenue Inspection Period"**) to complete its own due diligence, including any on-site inspections, of the suitability and condition of the Massachusetts Avenue Property; provided that City shall not conduct, with respect to the Massachusetts Avenue Property, any invasive testing, disturb vegetation , or otherwise interfere with the operation of the Massachusetts Avenue Property without the prior written consent of the School Board, which shall not be unreasonably withheld or delayed. City acknowledges that School Board will require compliance with the Jessica Lunsford Act and other Florida Statutes relating to access to educational facilities (**"Legal Restriction Requirements"**). If City's due diligence of the Massachusetts Avenue Property identifies conditions unacceptable to City, City may elect to accept the Massachusetts Avenue Property, or may terminate the Agreement with respect to conveyance of the Massachusetts Avenue Property only, prior to the end of the Massachusetts Avenue Inspection Period, and the parties shall have no further claim against each other under this Agreement with respect to conveyance of the Massachusetts Avenue Property only. City is obligated to complete its own due diligence of the suitability and conditions of the Massachusetts Avenue Property for City's intended uses. For that purpose, School Board grants the City and its consultants and agents or assigns, full right of entry upon the Massachusetts Avenue Property upon twenty-four (24) hour advance notice during the Inspection Period and thereafter until the closing hereunder, subject to School Board's requirements for compliance with the Legal Restriction Requirements. City, as a condition precedent to its exercise of such right of entry, specifically agrees to defend, indemnify and save and hold the School Board harmless from and against any loss, damage, liability, suit, claim, cost or expense (including reasonable attorneys' fees) arising from the exercise of City's or its planners, engineers, surveyors, architects, or other agents or consultants of such right of entry and inspection, to the fullest extent permitted by law and without waiver of sovereign immunity.

9. CLOSING.

a. Bluebird Groves Parkway Closing. Unless the City or School Board has previously terminated this Agreement with respect to the Bluebird Stormwater Property or the Developer Property, in accordance with the provisions hereinabove, the Bluebird Stormwater Property and Developer Property closing shall take place upon the date that is thirty (30) days after the end of the Bluebird Groves Inspection Period (the "**Bluebird Closing**"). At the Bluebird Closing, Developer shall execute and deliver to the School Board a special warranty deed substantially in the form of the attached **Exhibit "H"**, conveying, in accordance with all applicable laws and ordinances, indefeasible title to the Developer Property free and clear of all liens, special assessments, easement, reservation,

restrictions and encumbrances whatsoever except for the Permitted Exceptions. At the Bluebird Closing, School Board shall execute and deliver to the City a special warranty deed substantially in the form of the attached **Exhibit "K"**, conveying, in accordance with all applicable laws and ordinances, indefeasible title to the Bluebird Stormwater Property free and clear of all liens, special assessments, easement, reservation, restrictions and encumbrances whatsoever except for the Permitted Exceptions. Each party shall execute and deliver any other Bluebird Closing documents reasonably required by Developer, School Board or City (including any appropriate and customary affidavits of seller and any brokers, as applicable, as assurance against the existence of outstanding rights which could form the basis for construction liens, brokers' liens, unrecorded easements or claims of parties in possession, permitting the title company to delete the standard exceptions, including the "gap", pursuant to Florida Statutes 627.7841, as amended, and complying with the Foreign Investment in Real Property Act of 1980, as amended, and this Agreement relating to conveyance of the Developer Property and Bluebird Stormwater Property shall be closed. The Bluebird Closing shall take place as a "mail away" transaction with documents identified hereunder delivered at closing to the title agent selected by the School Board, who shall be the closing agent for the transaction.

b. 0.64 Acre Property Closing. Unless the City or School Board has previously terminated this Agreement with respect to the 0.64 Acre Property, in accordance with the provisions hereinabove, the 0.64 Acre Property closing shall take place upon the date that is thirty (30) days after the end of the 0.64 Acre Property Inspection Period (the "**0.64 Acre Property Closing**"). At the 0.64 Acre Property Closing, School Board shall execute and deliver to the City a special warranty deed substantially in the form of the attached **Exhibit "J"**, conveying, in accordance with all applicable laws and ordinances, indefeasible title to the 0.64 Acre Property free and clear of all liens, special assessments, easement, reservation, restrictions and encumbrances whatsoever except for the Permitted Exceptions. Each party shall execute and deliver any other 0.64 Acre Property Closing documents reasonably required by School Board or City (including any appropriate and customary affidavits of seller and any brokers, as applicable, as assurance against the existence of outstanding rights which could form the basis for construction liens, brokers' liens, unrecorded easements or claims of parties in possession, permitting the title company to delete the standard exceptions, including the "gap", pursuant to Florida Statutes 627.7841, as amended, and complying with the Foreign Investment in Real Property Act of 1980, as amended, and this Agreement relating to conveyance of the 0.64 Acres shall be closed. The 0.64 Acre Property Closing shall take place as a "mail away" transaction with documents identified hereunder delivered at closing to the title agent selected by the School Board, who shall be the closing agent for the transaction.

c. Massachusetts Avenue Property Closing. Unless City has previously terminated this Agreement with respect to the Massachusetts Avenue Property in accordance with the provisions hereinabove, the Massachusetts Avenue Property closing shall take place upon the date that is thirty (30) days after the expiration of the Massachusetts Avenue Property Inspection Period (as maybe extended) (the "**Massachusetts Avenue Property Closing**"). At Massachusetts Avenue Property Closing, the School Board shall execute and deliver to the City a special warranty deed substantially in the form of the attached **Exhibit "I"**,

conveying, in accordance with all applicable laws and ordinances, indefeasible title to the Massachusetts Avenue Property free and clear of all liens, special assessments, easement, reservation, restrictions and encumbrances whatsoever except for the Permitted Exceptions, and each party shall execute and deliver any other Massachusetts Avenue Property Closing documents reasonably required by either party (including any appropriate and customary affidavits of seller and any brokers, as applicable, as assurance against the existence of outstanding rights which could form the basis for construction liens, brokers' liens, unrecorded easements or claims of parties in possession, permitting the title company to delete the standard exceptions, including the "gap", pursuant to Florida Statutes 627.7841, as amended, and complying with the Foreign Investment in Real Property Act of 1980, as amended, and this Agreement with respect to the Massachusetts Avenue Property shall be closed. The relating to conveyance of Massachusetts Avenue Property Closing shall take place as a "mail away" transaction with documents identified hereunder delivered at closing to the title agent selected by the School Board, who shall be the closing agent for the transaction.

d. Each party shall pay for the cost of (i) all documentary stamp taxes required to be paid with respect to the respective deed and other instruments of conveyance, if any, for the property being conveyed to it, (ii) the cost of its Commitment and Title Policy at the standard Florida promulgated rates, including all search fees, premiums, and endorsements relating thereto, (iii) the cost of curing any of its title conditions subject to the provisions of this Agreement, (iv) the Survey ordered by such party, if applicable, and (v) all recording fees with respect to those of the closing documents which such party seeks to have recorded. Each of the respective parties shall bear its own attorneys' fees.

e. At Closing the City Manager for the City is authorized to execute any and all documents necessary to complete the transaction, and the Board Chair or Vice-Chair of the School Board is authorized to execute any and all documents necessary to complete the transaction,

10. REMEDIES. Upon the failure of any party to perform its obligations under this Agreement, the other parties' sole remedy shall be an equitable action for specific performance or injunction or action for declaratory judgment regarding the rights and obligations of the parties.

11. NOTICE. Any notice which may be permitted or required under this Agreement shall be in writing and shall be deemed to have been duly given; as of the date and time the notice is personally delivered; within three (3) calendar days after depositing the notice with the United States Postal Service, postage prepaid, by registered or certified mail with return receipt requested; within one (1) calendar day after depositing the notice with Federal Express or other overnight delivery service from which a receipt and tracking number may be obtained.

All notices shall be addressed as follows:

School Board: The School Board of Osceola County, Florida
Attn: Superintendent (or Designee)
817 Bill Beck Boulevard
Kissimmee, FL 34744-4492

With copy to:	Sarah Koren, Esq. Legal Counsel to the School Board of Osceola County, FL 817 Bill Beck Boulevard Kissimmee, FL 34744-4492
With copy to:	Anne van den Berg, Esq. Marchena & Graham, P.A. 914 Lake Baldwin Lane Suite 101 Orlando, FL 32814
City:	City of St. Cloud 1300 9th Street St. Cloud, FL 34769 Attn: Veronica Miller, City Manager
With copy to:	Daniel F. Mantzaris DeBeaubien, Simmons, Knight, Mantzaris & Neal, LLPP.O. Box 87Orlando, FL 32802
Developer:	Center Lake Properties, LLLP 102 W. Pineloch St. Suite 10 Orlando, FL 32806
With copy to:	
County:	Osceola County Attn: Don Fisher, County Manager 1 Courthouse Square, Suite 1100 Kissimmee, Florida 34741
With copy to:	Osceola County Attorney's Office 1 Courthouse Square, Suite 4200 Kissimmee, Florida 34741

By giving the other parties to this Agreement no less than fifteen (15) calendar days written notice thereof, each party to this Agreement shall have the right to change its address and specify as its new address for notice purposes any other address in the United States of America.

12. MISCELLANEOUS

a. Authority. Each party warrants and represents, with respect to itself, that neither the execution nor the performance of this Agreement requires any consent, vote or approval which has not been obtained, or at the appropriate time shall not have been given or obtained, nor shall it result in or constitute a breach or default under any indenture, contract or other commitment or restriction to which it is a party or by which it is bound. Each party

further warrants and represents, with respect to itself, that upon execution and delivery, this Agreement will be binding and enforceable against such party, or if a person is singing in a representative capacity, then the party for whom that person signs.

b. Approvals. Whenever any review or approval is required by any party, such party agrees that such review or approval will be promptly conducted and concluded. Moreover, each party agrees that it will act reasonably in exercising its review and approval functions hereunder and no approval shall be unreasonably delayed nor withheld.

c. Further Assurances. The parties hereto agree to execute any and all further instruments and documents and to take all such actions as may be reasonably required to carry out the terms of this Agreement and the transactions contemplated herein.

d. Exhibits. All exhibits referred to in this Agreement and attached hereto are incorporated herein in full and made a part of this Agreement by reference as if each exhibit were set forth in the body of this Agreement and duly executed by the parties hereto. Provided, however, that when an exhibit is comprised of a separate agreement, only the signatories to such agreement shall be deemed to be parties to that agreement and the provisions of this section shall not be construed so as extend any rights to non-signatories of such agreement.

e. No Partnership or Joint Ventures. Nothing set forth in this Agreement shall be deemed or construed as creating a legal partnership nor a legal joint venture between the parties hereto nor any other party, nor shall it cause any party to be responsible in any way for the debts and obligations of any other party.

f. No Third Party Beneficiaries. There are no third-party beneficiaries created or entitled by this Agreement. This Agreement has been entered into for the sole benefit and protection of the parties hereto and their respective successors and assigns, and no other person or entity shall have any rights or standing to enforce this Agreement or any provision hereof.

g. Attorneys' Fees. In the event of any dispute regarding, or any action to interpret or enforce, this Agreement, or any provision hereof, or any matter arising from this Agreement, each party shall be responsible for payment of its own costs, fees and expenses, including, but not limited to, witness fees, expert fees, consultant fees, attorney, paralegal and legal assistant fees, and other professional fees, whether suit be brought or not, and whether in settlement, in any declaratory action, in mediation, arbitration, bankruptcy or administrative proceeding, or at trial or on appeal.

h. Governing Law, Jurisdiction and Venue. This Agreement, and all extensions, renewals, amendments, supplements, and modifications thereto, and all questions relating to the validity, interpretation, performance, or enforcement thereof shall be governed by and construed in accordance with the laws of the State of Florida. Except for a suit in Federal court, venue for all suits to enforce this Agreement shall be in Osceola County, FL. Any legal disputes, proceedings, or actions arising out of or in connection with this Agreement

shall be brought in the Circuit Courts of Osceola County, FL, or, if appropriate, the United States District Court for the Middle District of Florida, Orlando Division.

i. Waiver. No failure of either party to exercise any power given hereunder or to insist upon strict compliance with any obligation specified herein, and no custom or practice at variance with the terms hereof, shall constitute a waiver of either party's right to demand exact compliance with the terms hereof. Nothing herein is intended to be, nor shall be deemed, an implied waiver of any legal right a party may have, and a waiver of legal rights, if any, may only be effective pursuant to an express written provision of this Agreement. Further, any such express waiver shall be limited by, and strictly construed in accordance with, the terms of the provision(s) containing the waiver.

j. No Waiver of Sovereign Immunity. Nothing in this Agreement is intended to serve, nor shall be construed, as a waiver of sovereign immunity by any agency or political subdivision to which sovereign immunity may be applicable. Nor shall this Agreement be construed to expand the limitations of liability for any agency or political subdivision to which sovereign immunity may be applicable beyond those limitations of liability set forth in Section 768.28, Florida Statutes.

k. Public Records. Public Records Act/Chapter 119 Requirements. Developer, also known as "Owner", agrees to comply with the Florida Public Records Act (Chapter 119, Florida Statutes) to the fullest extent applicable.

IF OWNER HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO OWNER'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS, 817 BILL BECK BOULEVARD, KISSIMMEE, FL 34744, PHONE: (407) 870-4600, EMAIL: PUBLICRECORDS@OSCEOLASCHOOL.NET.

l. Binding Effect. The provisions of this Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective heirs, administrators, executors, personal representatives, successors and assigns.

m. Time. Time is of the essence of this Agreement. Wherever under the terms and provisions of this Agreement something must be done within a period of days, such period shall: (i) not include the day from which such period commences; (ii) include the day upon which such period expires; (iii) expire at 5:00 p.m. local time on the day by which such thins is to be done; (iv) if six (6) days or more, be construed to mean calendar days, provided that if the final day of such period falls on a Saturday, Sunday, or Legal Holiday, such period shall be extended to the next business day; and (v) if less than six (6) days, be construed to exclude any Saturday, Sunday, or federal banking holiday.

n. Severability. This Agreement is intended to be performed in accordance with, and only to the extent permitted by, all applicable laws, ordinances, rules and regulations. If

any provision of this Agreement or the application thereof to any person or circumstance shall, for any reason and to any extent, be invalid or unenforceable, the remainder of this Agreement and the application of such provision to other persons or circumstances shall not be affected thereby but rather shall be enforced to the greatest extent permitted by law.

o. Entire Agreement. This Agreement contains the entire agreement of the parties hereto, and no representations, inducements, promises or agreements, oral or otherwise, between the parties not embodied herein shall be of any force or effect. Any amendment to this Agreement shall not be binding upon any of the parties hereto unless such amendment is in writing and executed by the parties hereto as provided for under the terms of this Agreement.

p. Counterparts. This Agreement may be executed in multiple counterparts, each of which shall constitute an original, but all of which taken together shall constitute one and the same instrument, and signature pages from one counterpart may be removed and attached to another counterpart to create a single, integrated counterpart with all necessary signatures. Delivery of an executed signature page of this Agreement by a delivery means as provided for a Notice herein, shall serve as having been duly presented and delivered.

q. Recording. This Agreement shall not be recorded in the Public Records of Osceola County, Florida.

r. Interpretation. This Agreement shall not be construed more strictly against one party than against another merely by virtue of the fact that it may have been prepared by counsel for one of the parties, it being recognized that all parties have contributed substantially and materially to the preparation hereof. The headings inserted at the beginning of each paragraph are for convenience only, and do not add to or subtract from the meaning of the contents of each paragraph.

s. **Exhibit "D"**. The Parties recognize that **Exhibit "D"** currently is only a depiction of the property purported to be represented and a legal description will be supplied and slipped in, without further amendment, upon the School Board's receipt of the survey and legal description of the 0.64 Acre Property.

[Remainder of Page Intentionally Left Blank. Signature Pages Follow.]

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement as of the date set forth below.

Signed, sealed and delivered in the presence of:

Witness:

_____

Print Name:_____
Address: _____

_____

_____

Print Name:_____
Address: _____

_____

THE SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA

By:_____
Print Name:_____
Chair

ATTEST:

By:_____
Superintendent

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization, this ____ day of _____, 20__ , by _____ as _____ of the School Board of Osceola County, Florida, a public body corporate organized and existing under the Constitution and laws of the State of Florida ☐ who is personally known to me or ☐ who has produced _____ as identification.

(Seal)

_____
Notary Public - State of Florida
Print Notary Name:
My Commission Number is:

IN WITNESS WHEREOF, the parties hereto have, by their duly authorized representatives, executed this Agreement on the dates set forth below.
DATED this _____ day of _____ 2025.

"COUNTY":

ATTEST:
OSCEOLA COUNTY CLERK
OF THE BOARD

BOARD OF COUNTY COMMISSIONERS OF OSCEOLA COUNTY, FLORIDA

By:_____

By:_____
Name: _____
Chair/Vice Chair

As authorized for execution at the Board of County Commissioners meeting of:

_____

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement as of the date set forth below.

CITY OF ST. CLOUD

By: _____
Christian B. Robertson, Mayor

ATTEST:
CITY OF ST. CLOUD CITY CLERK

By: _____
Ivy Lauro, City Clerk

As authorized for execution at the City Council meeting of:

5/8/2025

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement as of the date set forth below.

Signed, sealed and delivered in the presence of:

Witnesses:

_____
Print Name:_____
Address: _____
_____

_____
Print Name:_____
Address: _____
_____

CENTER LAKE PROPERTIES, LLLP

By: Pineloch Management Corp., its General Partner

By:_____
Print Name:_____
Its:_____

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization, this ____ day of _____, 20__ , by _____ as _____ of, Pineloch Management Corp., the general partner of Center Lake Properties, LLLP, ☐ who is personally known to me or ☐ who has produced _____ as identification.

(Seal)

_____
Notary Public - State of Florida
Print Notary Name:
My Commission Number is:

EXHIBIT "A"

LEGAL DESCRIPTION
Massachusetts Avenue Property

A parcel of land being a portion of Lots 61, 68 and 77, THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION of Section 11, Township 26 South, Range 30 East, according to the plat thereof, as recorded in Plat Book B, Page 2 of the Public Records of Osceola County, Florida, being more particularly described as follows:

Commence at the Northeast corner of Tract A, SKY LAKES PHASE 1, according to the plat thereof, as recorded in Plat Book 31, Pages 125 through 132 of the Public Records of Osceola County, Florida; thence N89°49'58"W, along the North line of said Tract A, a distance of 355.08 feet to the Point of Beginning; thence continue N89°49'58"W, along said North line and the boundary of SKY LAKES PHASE 2 AND 3, according to the plat thereof, as recorded in Plat Book 32, Pages 98 through 104 of the Public Records of Osceola County, Florida, a distance of 290.00 feet to the East Right of Way line of Massachusetts Avenue; thence departing said boundary line, run N00°03'24"E, along said East Right of Way line, a distance of 979.41 feet to a point on the South line of lands described in Official Records Book 1763, Page 2018 of the Public Records of Osceola County, Florida; thence departing said East Right of Way line, run N89°55'40"E, along said South line, a distance of 290.00 feet; thence S00°03'24"W, a distance of 980.62 feet to the Point of Beginning.

Containing 284,204 square feet or 6.52 acres, more or less.

EXHIBIT "B"
LEGAL DESCRIPTION
Bluebird Stormwater Property

A parcel of land being a portion of Tract OS1, PINE GROVE RESERVE PHASE 1, according to the plat thereof, as recorded in Plat Book 34, Pages 93 through 101 of the Public Records of Osceola County, Florida, being more particularly described as follows:

Begin at the Northeast corner of Tract OS1, PINE GROVE RESERVE PHASE 1, according to the plat thereof, as recorded in Plat Book 34, Pages 93 through 101 of the Public Records of Osceola County, Florida; thence S00°05'28"E, along the East line of said Tract OS1, a distance of 231.04 feet to the Southeast corner of Tract OS1; thence departing said East line, run the following three (3) courses and distances along the South boundary line of said Tract OS1: thence N80°19'02"W, a distance of 75.20 feet; thence N86°57'26"W, a distance of 139.53 feet; thence S76°12'38"W, a distance of 36.88 feet; thence N00°19'46"W, a distance of 218.33 feet to the South Right of Way line of Bluebird Groves Parkway; thence N89°40'06"E, along said South Right of Way line, a distance of 250.17 feet to the Point of Beginning.

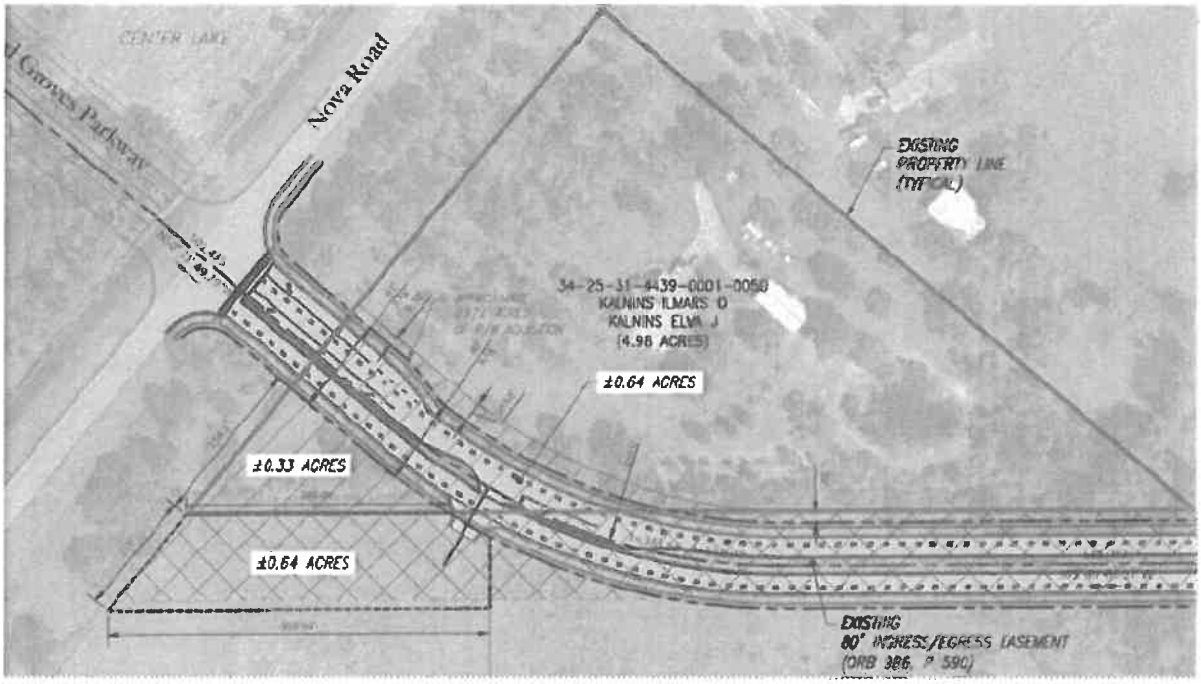
Containing 54,201 square feet or 1.24 acres, more or less.

EXHIBIT "C"
LEGAL DESCRIPTION
Developer Property

A parcel of land being a portion of Lot 5, Nova Estates, according to the map or plat thereof, as recorded in Plat Book 13, page 184 of the Public Records of Osceola County, Florida, being more particularly described as:

Beginning at the Southwest corner of said Lot 5; thence run the following two (s) courses along the South line of said Lot 5; run S 89°57'32" E., a distance of 16.67 feet; thence run N 89°40'02" E., a distance of 562.44 feet to a point on a non-tangent curve, concave to the North, having a radius of 505.00 feet and a central angle of 39°57'53"; thence run Westerly along the arc of said curve, a distance of 352.25 feet (Chord Bearing = N. 70°19'48" W., Chord = 345.15 feet); thence run N. 50°20'51" W., a distance of 119.42 feet to a point on the Easterly right of way line of Nova Road; thence run S. 39°39'01" W., along said Easterly right of way line, a distance of 254.09 feet to the Point of Beginning.

EXHIBIT "D"
LEGAL DESCRIPTION
0.64 Acre Property



The top 0.64 Acres is the portion being conveyed to the City for Bluebird Groves Parkway.

EXHIBIT "E"
Depiction of City Portion of Bluebird Groves Parkway

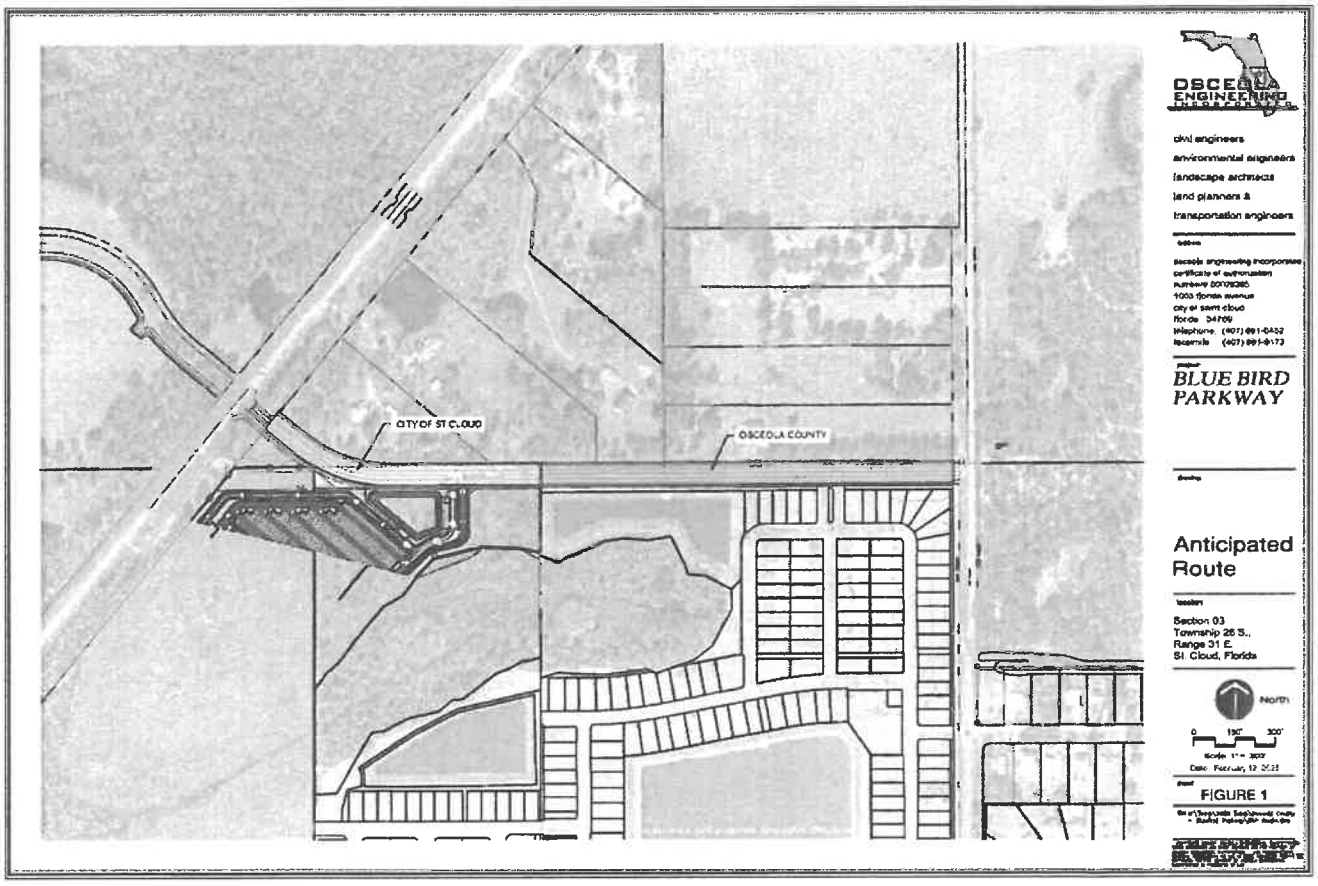


EXHIBIT "F"

Approximate Location of Curb Cut on Bluebird Groves Parkway

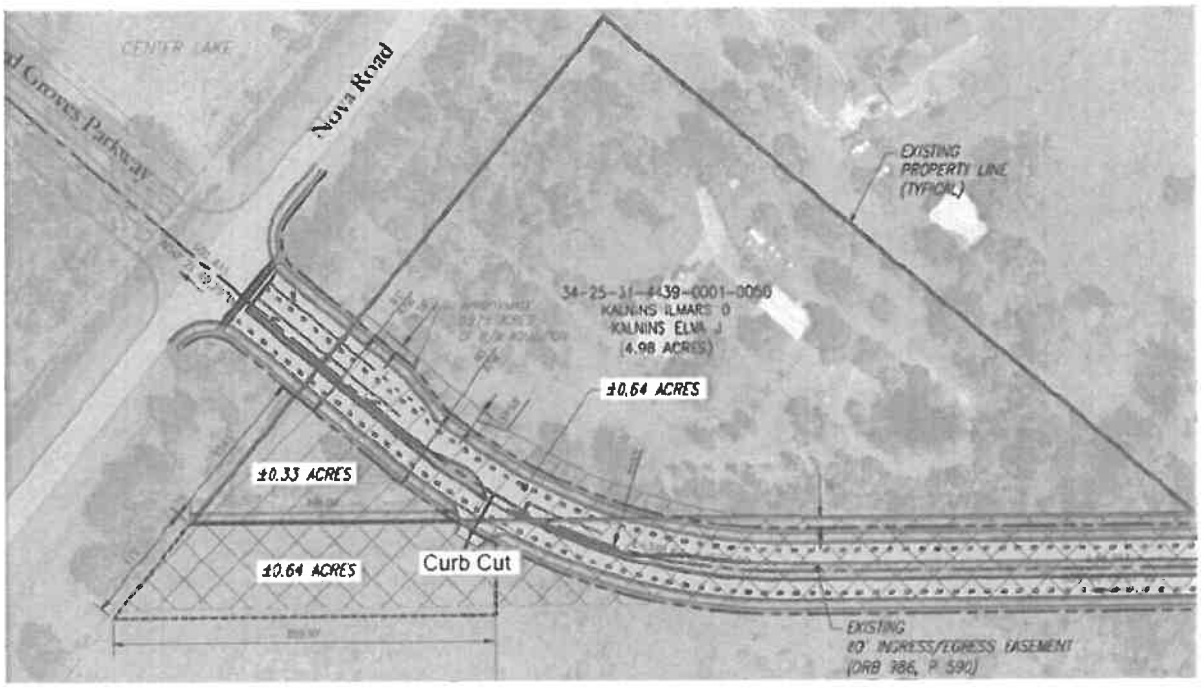


EXHIBIT "G"

Cost Estimate

Blue Bird Parkway Improvements

	Osceola County Segment				City of St. Cloud Segment				Full Roadway
General Conditions	Quantity	Units	Unit Cost	Total Cost	Quantity	Units	Unit Cost	Total Cost	Total Cost
Mobilization	1	LS	$ 50,000.00	$ 50,000.00	1	LS	$ 39,400.77	$ 39,400.77	$ 89,400.77
Erosion Control Maintenance	1	LS	$ 25,000.00	$ 25,000.00	1	LS	$ 19,700.39	$ 19,700.39	$ 44,700.39
Silt Fence	7500	LF	$ 1.50	$ 11,250.00	5910	LF	$ 1.50	$ 8,865.17	$ 20,115.17
Inlet Protection	10	EA	$ 300.00	$ 3,000.00	8	EA	$ 300.00	$ 2,364.05	$ 5,364.05
Construction Entrance	1	EA	$ 8,500.00	$ 8,500.00	1	EA	$ 8,500.00	$ 8,500.00	$ 17,000.00
SUBTOTAL				$ 97,750.00				$ 78,830.38	$ 176,580.38

Earthwork*	Quantity	Units	Unit Cost	Total Cost	Quantity	Units	Unit Cost	Total Cost	Total Cost
Clear, Grub, Disc Site	2.793	AC	$ 2,350.00	$ 6,563.55	2.201	AC	$ 2,350.00	$ 5,172.18	$ 11,735.73
Pond Dewatering	1	LS	$ 75,000.00	$ 75,000.00	1	LS	$ 99,425.49	$ 99,425.49	$ 174,425.49
Excavation Cut to Fill	8771	CY	$ 3.69	$ 32,364.99	17557	CY	$ 3.69	$ 64,785.27	$ 97,150.26
Move & Place Fill	8771	CY	$ 2.55	$ 22,366.05	17557	CY	$ 2.55	$ 44,770.31	$ 67,136.36
Fine Grade Disturbed area	7500	SY	$ 1.35	$ 10,125.00	12434	SY	$ 1.35	$ 16,785.39	$ 26,910.39
Rough Grade Pavement Box	6875	SY	$ 0.62	$ 4,262.50	5418	SY	$ 0.62	$ 3,358.92	$ 7,621.42
Sod Pond Slopes	6875	SY	$ 3.50	$ 24,062.50	12434	SY	$ 3.50	$ 43,517.68	$ 67,580.18
SUBTOTAL				$ 174,744.59				$ 277,815.24	$ 452,559.83

Paving & Concrete	Quantity	Units	Unit Cost	Total Cost	Quantity	Units	Unit Cost	Total Cost	Total Cost
Striping & Signage	1	LS	$ 6,242.68	$ 6,242.68	1	LS	$ 4,919.33	$ 4,919.33	$ 11,162.01
12" Stabilized Subgrade (LBR 40)	8675	SY	$ 9.00	$ 78,075.00	6896	SY	$ 9.00	$ 61,524.31	$ 139,599.31
8" Limerock Base	6455	SY	$ 23.50	$ 151,692.50	5087	SY	$ 23.50	$ 119,536.04	$ 271,228.54
2.5" Sp12.5 Asphalt	6455	SY	$ 21.65	$ 139,750.75	5087	SY	$ 21.65	$ 110,125.75	$ 249,876.50
A Curb	2795	LF	$ 23.25	$ 64,983.75	2203	LF	$ 23.25	$ 51,208.20	$ 116,191.95
F Curb	2975	LF	$ 22.20	$ 66,045.00	2344	LF	$ 22.20	$ 52,044.48	$ 118,089.48
10' wide Sidewalk	1450	LF	$ 85.00	$ 123,250.00	1143	LF	$ 85.00	$ 97,172.91	$ 220,372.91
6" Driveway	40	LF	$ 65.00	$ 2,600.00	32	LF	$ 65.00	$ 2,048.84	$ 4,648.84
SUBTOTAL				$ 632,639.68				$ 498,529.86	$ 1,131,169.54

Storm Improvements	Quantity	Units	Unit Cost	Total Cost	Quantity	Units	Unit Cost	Total Cost	Total Cost
12" x 18" ERCP	32	LF	$ 65.00	$ 2,080.00	25	LF	$ 65.00	$ 1,639.07	$ 3,719.07
18" RCP	506	LF	$ 70.50	$ 35,673.00	399	LF	$ 70.50	$ 28,110.88	$ 63,783.88
24" RCP	645	LF	$ 95.50	$ 61,597.50	508	LF	$ 95.50	$ 48,539.78	$ 110,137.28
36" RCP	915	LF	$ 183.00	$ 167,445.00	721	LF	$ 183.00	$ 131,949.25	$ 299,394.25
Type J Manhole	2	EA	$ 6,245.93	$ 12,491.86	2	EA	$ 6,245.93	$ 12,491.86	$ 24,983.72
Type P-6 Inlet	10	EA	$ 7,885.00	$ 78,850.00	10	EA	$ 7,885.00	$ 78,850.00	$ 157,700.00
12"x18" MES	2	EA	$ 2,135.00	$ 4,270.00	2	EA	$ 2,135.00	$ 4,270.00	$ 8,540.00
Storm Control Structure	0	EA	$ -	$ -	1	EA	$ 8,700.00	$ 8,700.00	$ 8,700.00
24" MES	1	EA	$ 3,500.00	$ 3,500.00	1	EA	$ 3,500.00	$ 3,500.00	$ 7,000.00
30" MES	1	EA	$ 5,465.00	$ 5,465.00	1	EA	$ 5,465.00	$ 5,465.00	$ 10,930.00
Concrete Endwall	1	EA	$ 38,868.61	$ 38,868.61	1	EA	$ 38,868.61	$ 38,868.61	$ 77,737.22
SUBTOTAL				$ 410,240.97				$ 382,394.45	$ 772,625.42

Land Area	Quantity	Units	Unit Cost	Total Cost
Stormwater Pond Oversizing	0.766	AC	$70,000.00	$ 53,620.00
ROW Dedication	2.793	AC	$70,000.00	$ 195,510.00
SUBTOTAL				$ 249,130.00

	Quantity	Units	Unit Cost	Total Cost
	0.000	AC	$ 70,000.00	$ 0.00
	0.00	AC	$ 70,000.00	$ 0.00
				$ 0.00

	Total Cost
	$ 53,620.00
	$ 195,510.00
	$ 249,130.00

*** Land Purchase Agreement per acre cost

**** City acreage not included in mobility fee credit calculations below.

Design & Permitting	Quantity	Units	Unit Cost	Total Cost
Surveying (design level, layout & as-builts)			$ 42,000.00	$ 42,000.00
Geotechnical Fees (design level & density)			$ 42,000.00	$ 42,000.00
Engineering Fees (design)			$ 168,000.00	$ 168,000.00
SUBTOTAL				$ 252,000.00

	Quantity	Units	Unit Cost	Total Cost
			$ 33,000.00	$ 33,000.00
			$ 33,000.00	$ 33,000.00
			$ 132,000.00	$ 132,000.00
				$ 198,000.00

	Total Cost
	$ 75,000.00
	$ 75,000.00
	$ 300,000.00
	$ 450,000.00

Permitting Application Fees	Quantity	Units	Unit Cost	Total Cost
Application Fees			$ 5,600.00	$ 5,600.00
CEI Services			$ 131,537.52	$ 131,537.52
Performance Bond Fees			$ 88,652.73	$ 88,652.73
Maintenance Bond Fees			$ 35,461.69	$ 35,461.69
SUBTOTAL				$ 261,251.94

	Quantity	Units	Unit Cost	Total Cost
			$ 4,400.00	$ 4,400.00
			$ 121,755.99	$ 121,755.99
			$ 69,655.72	$ 69,655.72
			$ 27,862.29	$ 27,862.29
				$ 223,674.00

	Total Cost
	$ 10,000.00
	$ 253,293.52
	$ 158,308.45
	$ 83,323.38
	$ 484,925.35

Total Construction Cost	Quantity	Units	Unit Cost	Total Cost
	Osceola County		$ 2,077,756.93	City of St. Cloud $ 1,638,233.93

	Total Cost
	$ 3,716,990.52

Public Construction Management Fee	Quantity	Units	Unit Cost	Total Cost
	Osceola County		$ 103,887.85	City of St. Cloud $ 81,961.70

	Total Cost
	$ 185,849.53

not to exceed $ 204,500

Eligible Mobility Fee Credits	Quantity	Units	Unit Cost	Total Cost
	Osceola County		$ 2,181,644.41	City of St. Cloud $ 1,721,195.63

	Total Cost
	$ 3,902,840.04

* CEI Services = 10% cost of construction

* Construction Admin. = 5% cost of construction

* Perf Bond Fee = 5% bond premium (1.25% cost) for 1 year

* Maint. Bond Fee = 5% bond premium (2.5% cost) for 2 years

EXHIBIT "H"

Form of Special Warranty Deed for Developer Property

WARRANTY DEED

THIS WARRANTY DEED made as of this _____ day of _____, 2025, by **CENTER LAKE PROPERTIES, LLLP**, a Florida limited liability limited partnership, whose address is P.O. Box 568367, Orlando, Florida 32856-8367 ("**Grantor**"), to **SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA**, a public body corporate organized and existing under the Constitution and laws of the State of Florida, having an address of 817 Bill Beck Boulevard, Kissimmee, Florida 34744 (the "**Grantee**").

(Whenever used herein, the terms "Grantor" and "Grantee" shall be deemed to include the parties to this Warranty Deed and the heirs, personal representatives and assigns of individuals, and the successors and assigns of corporations, limited liability companies or partnerships. The singular shall be deemed to include the plural, and vice versa, where the context so permits.)

WITNESSETH that the Grantor, for and in consideration of the sum of Ten and No/100 Dollars ($10.00) and other consideration, receipt of which is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto Grantee, all that certain land situate in Osceola County, Florida, more particularly described in **Exhibit A** attached hereto (the "**Property**").

TOGETHER, with all tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD the Property in fee simple forever.

AND THE GRANTOR hereby covenants with Grantee that Grantor is lawfully seized of the Property in fee simple; that Grantor has good right and lawful authority to sell and convey said land; and that Grantor hereby fully warrants the title to said land and will defend the Property against the lawful claims and demands of all persons whomsoever. The conveyance is subject to taxes for the year 2025 and thereafter, and easements, reservations and restrictions of record, but this reference shall not act to reimpose the same.

IN WITNESS WHEREOF, the said Grantor has caused these presents to be executed in its name, the day and year first above written.

Signed, sealed and delivered in the presence of:	CENTER LAKE PROPERTIES, LLLP By: Pineloch Management Corp., its General Partner
_____ Print Name:_____ Address: _____ _____	By:_____ Print Name:_____ Its:_____
_____ Print Name:_____ Address: _____ _____	

(CORPORATE SEAL)

STATE OF _____
COUNTY OF _____

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization, this ____ day of _____, 20__, by _____ as _____ of, Pineloch Management Corp., the general partner of Center Lake Properties, LLLP, ☐ who is personally known to me or ☐ who has produced _____ as identification.
(SEAL)

_____
Notary Public

_____
Print Name
Commission Expires:

EXHIBIT "A"
LEGAL DESCRIPTION

A parcel of land being a portion of Lot 5, Nova Estates, according to the map or plat thereof, as recorded in Plat Book 13, page 184 of the Public Records of Osceola County, Florida, being more particularly described as:

Beginning at the Southwest corner of said Lot 5; thence run the following two (s) courses along the South line of said Lot 5; run S 89°57'32" E., a distance of 16.67 feet; thence run N 89°40'02" E., a distance of 562.44 feet to a point on a non-tangent curve, concave to the North, having a radius of 505.00 feet and a central angle of 39°57'53"; thence run Westerly along the arc of said curve, a distance of 352.25 feet (Chord Bearing = N. 70°19'48" W., Chord = 345.15 feet); thence run N. 50°20'51" W., a distance of 119.42 feet to a point on the Easterly right of way line of Nova Road; thence run S. 39°39'01" W., along said Easterly right of way line, a distance of 254.09 feet to the Point of Beginning.

EXHIBIT "I"
Form of Special Warranty Deed for Massachusetts Avenue Property

WARRANTY DEED

THIS WARRANTY DEED made as of this _____ day of _____, 2025, by **SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA**, a public body corporate organized and existing under the Constitution and laws of the State of Florida, having an address of 817 Bill Beck Boulevard, Kissimmee, Florida 34744 ("**Grantor**"), to the **CITY OF ST. CLOUD**, a municipal corporation organized and existing under the laws of the State of Florida, whose address is 1300 9th Street, St. Cloud, Florida 34769 (the "**Grantee**").

(Whenever used herein, the terms "Grantor" and "Grantee" shall be deemed to include the parties to this Warranty Deed and the heirs, personal representatives and assigns of individuals, and the successors and assigns of corporations, limited liability companies or partnerships. The singular shall be deemed to include the plural, and vice versa, where the context so permits.)

WITNESSETH that the Grantor, for and in consideration of the sum of Ten and No/100 Dollars ($10.00) and other consideration, receipt of which is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto Grantee, all that certain land situate in Osceola County, Florida, more particularly described in **Exhibit A** attached hereto (the "**Property**").

TOGETHER, with all tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD the Property in fee simple forever.

AND THE GRANTOR hereby covenants with Grantee that Grantor is lawfully seized of the Property in fee simple; that Grantor has good right and lawful authority to sell and convey said land; and that Grantor hereby fully warrants the title to said land and will defend the Property against the lawful claims and demands of all persons whomsoever. The conveyance is subject to taxes for the year 2025 and thereafter, and easements, reservations and restrictions of record, but this reference shall not act to reimpose the same.

IN WITNESS WHEREOF, the said Grantor has caused these presents to be executed in its name, the day and year first above written.

Signed, Sealed and Delivered
in the presence of:

GRANTOR:

THE SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA, a public body corporate organized and existing under the Constitution and laws of the State of Florida

WITNESS: _____

Print Name: _____

WITNESS: _____

Print Name: _____

By: _____

Name: _____, Chair

Attest: _____
Mark Shanoff, Ed. D, Superintendent

(CORPORATE SEAL)

STATE OF _____
COUNTY OF _____

The forgoing instrument was acknowledged before me this _____ day of _____ 20__ by _____ as _____ of **THE SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA, a public body corporate organized and existing under the Constitution and laws of the State of Florida**, on behalf of the corporation by means of □physical presence or □ online notarization. She/He personally appeared before me, is personally known to me or has produced _____ as identification and who did (did not) take an oath.

(SEAL)

_____
Notary Public

_____
Print Name
Commission Expires:

EXHIBIT "A"
LEGAL DESCRIPTION

A parcel of land being a portion of Lots 61, 68 and 77, THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION of Section 11, Township 26 South, Range 30 East, according to the plat thereof, as recorded in Plat Book B, Page 2 of the Public Records of Osceola County, Florida, being more particularly described as follows:

Commence at the Northeast corner of Tract A, SKY LAKES PHASE 1, according to the plat thereof, as recorded in Plat Book 31, Pages 125 through 132 of the Public Records of Osceola County, Florida; thence N89°49'58"W, along the North line of said Tract A, a distance of 355.08 feet to the Point of Beginning; thence continue N89°49'58"W, along said North line and the boundary of SKY LAKES PHASE 2 AND 3, according to the plat thereof, as recorded in Plat Book 32, Pages 98 through 104 of the Public Records of Osceola County, Florida, a distance of 290.00 feet to the East Right of Way line of Massachusetts Avenue; thence departing said boundary line, run N00°03'24"E, along said East Right of Way line, a distance of 979.41 feet to a point on the South line of lands described in Official Records Book 1763, Page 2018 of the Public Records of Osceola County, Florida; thence departing said East Right of Way line, run N89°55'40"E, along said South line, a distance of 290.00 feet; thence S00°03'24"W, a distance of 980.62 feet to the Point of Beginning.

Containing 284,204 square feet or 6.52 acres, more or less.

EXHIBIT "J"
Form of Special Warranty Deed for 0.64 Acre Property

WARRANTY DEED

THIS WARRANTY DEED made as of this _____ day of _____, 2025, by **SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA**, a public body corporate organized and existing under the Constitution and laws of the State of Florida, having an address of 817 Bill Beck Boulevard, Kissimmee, Florida 34744 ("**Grantor**"), to the **CITY OF ST. CLOUD**, a municipal corporation organized and existing under the laws of the State of Florida.

(Whenever used herein, the terms "Grantor" and "Grantee" shall be deemed to include the parties to this Warranty Deed and the heirs, personal representatives and assigns of individuals, and the successors and assigns of corporations, limited liability companies or partnerships. The singular shall be deemed to include the plural, and vice versa, where the context so permits.)

WITNESSETH that the Grantor, for and in consideration of the sum of Ten and No/100 Dollars ($10.00) and other consideration, receipt of which is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto Grantee, all that certain land situate in Osceola County, Florida, more particularly described in **Exhibit A** attached hereto (the "**Property**").

TOGETHER, with all tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD the Property in fee simple forever.

AND THE GRANTOR hereby covenants with Grantee that Grantor is lawfully seized of the Property in fee simple; that Grantor has good right and lawful authority to sell and convey said land; and that Grantor hereby fully warrants the title to said land and will defend the Property against the lawful claims and demands of all persons whomsoever. The conveyance is subject to taxes for the year 2025 and thereafter, and easements, reservations and restrictions of record, but this reference shall not act to reimpose the same.

IN WITNESS WHEREOF, the said Grantor has caused these presents to be executed in its name, the day and year first above written.

Signed, Sealed and Delivered
in the presence of:

GRANTOR:

THE SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA, a public body corporate organized and existing under the Constitution and laws of the State of Florida

WITNESS: _____

Print Name: _____

By: _____

Name: _____, Chair

Attest: _____
Mark Shanoff, Ed. D, Superintendent

WITNESS: _____

Print Name: _____

(CORPORATE SEAL)

STATE OF _____
COUNTY OF _____

The forgoing instrument was acknowledged before me this _____ day of _____ 20__ by _____ as _____ of **THE SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA, a public body corporate organized and existing under the Constitution and laws of the State of Florida**, on behalf of the corporation by means of □physical presence or □ online notarization. She/He personally appeared before me, is personally known to me or has produced _____ as identification and who did (did not) take an oath.

(SEAL)

_____
Notary Public

_____
Print Name
Commission Expires:

EXHIBIT "A"
LEGAL DESCRIPTION

EXHIBIT "K"
Form of Special Warranty Deed for Bluebird Stormwater Property

WARRANTY DEED

THIS WARRANTY DEED made as of this _____ day of _____, 2025, by **SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA**, a public body corporate organized and existing under the Constitution and laws of the State of Florida, having an address of 817 Bill Beck Boulevard, Kissimmee, Florida 34744 ("**Grantor**"), to the **CITY OF ST. CLOUD**, a municipal corporation organized and existing under the laws of the State of Florida.

(Whenever used herein, the terms "Grantor" and "Grantee" shall be deemed to include the parties to this Warranty Deed and the heirs, personal representatives and assigns of individuals, and the successors and assigns of corporations, limited liability companies or partnerships. The singular shall be deemed to include the plural, and vice versa, where the context so permits.)

WITNESSETH that the Grantor, for and in consideration of the sum of Ten and No/100 Dollars ($10.00) and other consideration, receipt of which is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto Grantee, all that certain land situate in Osceola County, Florida, more particularly described in **Exhibit A** attached hereto (the "**Property**").

TOGETHER, with all tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD the Property in fee simple forever.

AND THE GRANTOR hereby covenants with Grantee that Grantor is lawfully seized of the Property in fee simple; that Grantor has good right and lawful authority to sell and convey said land; and that Grantor hereby fully warrants the title to said land and will defend the Property against the lawful claims and demands of all persons whomsoever. The conveyance is subject to taxes for the year 2025 and thereafter, and easements, reservations and restrictions of record, but this reference shall not act to reimpose the same.

IN WITNESS WHEREOF, the said Grantor has caused these presents to be executed in its name, the day and year first above written.

Signed, Sealed and Delivered
in the presence of:

GRANTOR:

THE SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA, a public body corporate organized and existing under the Constitution and laws of the State of Florida

WITNESS: _____

Print Name: _____

WITNESS: _____

Print Name: _____

By: _____

Name: _____, Chair

Attest: _____
Mark Shanoff, Ed. D, Superintendent

(CORPORATE SEAL)

STATE OF _____
COUNTY OF _____

The forgoing instrument was acknowledged before me this _____ day of _____ 20__ by _____ as _____ of **THE SCHOOL BOARD OF OSCEOLA COUNTY, FLORIDA, a public body corporate organized and existing under the Constitution and laws of the State of Florida**, on behalf of the corporation by means of □physical presence or □ online notarization. She/He personally appeared before me, is personally known to me or has produced _____ as identification and who did (did not) take an oath.

(SEAL)

_____
Notary Public

_____
Print Name
Commission Expires:

EXHIBIT "A"
LEGAL DESCRIPTION

A parcel of land being a portion of Tract OS1, PINE GROVE RESERVE PHASE 1, according to the plat thereof, as recorded in Plat Book 34, Pages 93 through 101 of the Public Records of Osceola County, Florida, being more particularly described as follows:

Begin at the Northeast corner of Tract OS1, PINE GROVE RESERVE PHASE 1, according to the plat thereof, as recorded in Plat Book 34, Pages 93 through 101 of the Public Records of Osceola County, Florida; thence S00°05'28"E, along the East line of said Tract OS1, a distance of 231.04 feet to the Southeast corner of Tract OS1; thence departing said East line, run the following three (3) courses and distances along the South boundary line of said Tract OS1: thence N80°19'02"W, a distance of 75.20 feet; thence N86°57'26"W, a distance of 139.53 feet; thence S76°12'38"W, a distance of 36.88 feet; thence N00°19'46"W, a distance of 218.33 feet to the South Right of Way line of Bluebird Groves Parkway; thence N89°40'06"E, along said South Right of Way line, a distance of 250.17 feet to the Point of Beginning.

Containing 54,201 square feet or 1.24 acres, more or less.

Meeting: November 13, 2025

Agenda Item Type: Consent Agenda
Preliminary Subdivision Plan for Walker Property, PSP24-00001

Community Development Agenda Item:
Request City Council's approval of a Preliminary Subdivision Plan for Walker Property, PSP24-00001.
COST: No cost associated with this item.
This item is to approve the Preliminary Subdivision Plan for Walker Property, which contains 69 lots for single-family detached homes on approximately +/- 25.59 acres of land, generally located north of Old Oak Trail, east of Chisholm Road, south of Chisholm Park Trail, and west of south Narcoossee Road.

Strategic Key Focus Areas:
High-Performing Government

Background Information:
The subject property is generally located south of Chisholm Park Trail, west of S. Narcoossee Road, and north of Old Oak Trail. The property is comprised of three undeveloped parcels totaling approximately 25.59 acres. The development as proposed will support residential infill in an appropriate area with existing infrastructure, compatible residential uses, and access to arterial roadways.

The current zoning pursuant to the automatic conversion of annexed land from County to City is "R-E" Single-Family Dwelling. The applicant requested to rezone the subject property to "PUD" Planned Unit Development, which is consistent with the assigned Future Land Use Map Amendment to Low Density Residential. The "PUD" Planned Unit Development was approved by City Council on April 25, 2024.

The proposed development is for 69 single-family detached homes, front loaded.
Total net developable: 25.59
Gross Residential Acreage: 20.92
Gross Residential Density 2.70 du/ac

Legal Authority:
Per Land Development Code Section 2.4.4.G – City Council Review, at its regularly scheduled meeting, the City Council shall review the Preliminary Subdivision Plan. Based on the information generated and the comments made during the development review, the City Council shall approve, disapprove or approve subject to stated conditions. Approval of the Preliminary Subdivision Plan shall authorize review for approval of the Subdivision Construction Plans by the Development Review Committee as outlined in section 2.4.5.

Budget and Recommendation:

There is no cost associated with this item.

Staff recommends **APPROVAL with conditions** of the Walker Property Preliminary Subdivision Plan (PSP24-00001) subject to the following conditions:

Planning Conditions:
Prior to issuance of the Certificate of Completion, the applicant will construct the 10' multipurpose trail to extend along Chisholm Park Trail to Narcoossee Rd (the City is responsible for acquiring the necessary off-site property) as well as continue through the development (down Albany Ave to Narcoossee Road).

If construction of the 10' multi-purpose trail is not possible due to engineering constraints, the developer agrees to pay the value of the necessary improvements to the City of St. Cloud for deposit into the Sidewalk Fund. The amount paid into the fund will be based upon an engineer's Certified Cost Estimate and validated by the City Engineer prior to issuance of the Certificate of Completion.

Finance Director's Comments:
N/A

Procurement Director's Comments:
N/A

City Manager's Comments:
City Manager recommends approval

City Council Action:
11/13/25 - Final Action

Attachments:
1. 1. PSP24-00001 Walker Property PSP Staff Report CC 11.13.25
2. 2. PSP24-00001 Walker Property School Capacity Report
3. 3. PSP24-00001 Walker Property Full Set of Plans

DRC Case No. /Ord. No.
PSP24-00001

Type of Application
Preliminary Subdivision Plan

Case Name
Walker Property

Applicant/Agent:
Osceola Engineering/ Broc Althafer

Owner(s)
Home Dynamics Narcoossee LLC/
David Shack

Address/Location
north of Old Oak Trail, east of Chisholm Road, south of Chisholm Park Trail, and west of South Narcoossee Road.

Parcel ID No.
Parcel 1:
29-25-31-4910-0051-0010
Parcel 2:
29-25-31-4910-0060-0070
Parcel 3:
29-25-31-4910-0060-0010

Total Land Area
+/- 25.59 acres

Project Planner
Virginia Renteria
Senior Planner

City Council Staff Report
Meeting Date: November 13, 2025

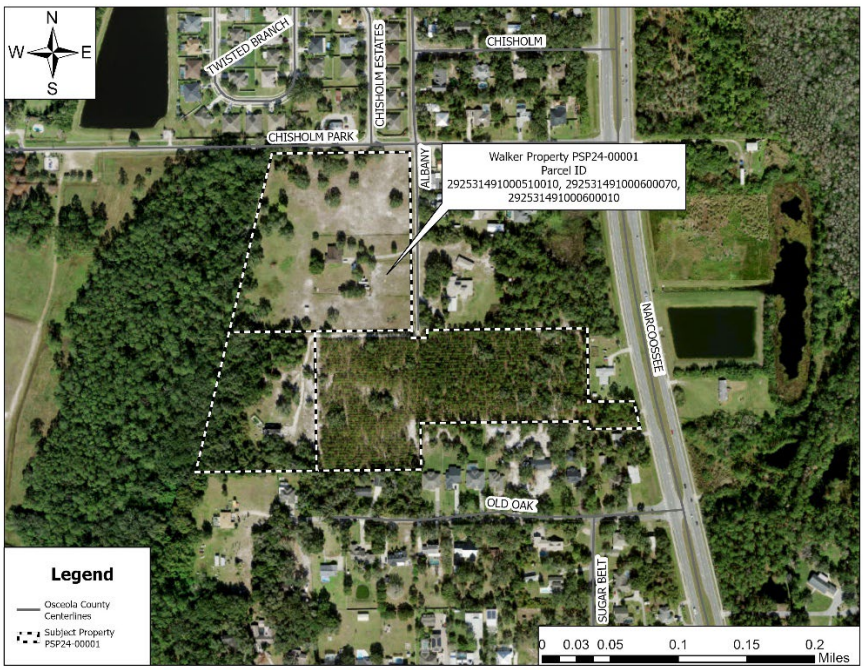


Figure 1 – Aerial Map

Request
The applicant is requesting consideration of a Preliminary Subdivision Plan (PSP) for approximately +/- 25.59 acres of land, known as Walker Property, as shown in **Figure 1** above.

Background
The subject property is generally located south of Chisholm Park Trail, west of S. Narcoossee Road, north of Old Oak Trail. The property is comprised of three undeveloped parcels totaling approximately 25.59 acres. The development as proposed will support residential infill in an appropriate area with existing infrastructure, compatible residential uses, and access to arterial roadways.

The current zoning pursuant to the automatic conversion of annexed land from County to City is “R-E” Single-Family Dwelling. The applicant requested to rezone the subject property to “PUD” Planned Unit Development, which is consistent with the assigned Future Land Use Map Amendment to Low Density Residential. The “PUD” Planned Unit Development was approved by City Council April 25,2024.
The proposed development is for 69 single-family detached homes, front loaded.

Total net developable: 25.59
Gross Residential Acreage: 20.92
Gross Residential Density 2.70 du/ac

Consistency With Strategic Plan Goals:

The proposed Preliminary Subdivision Plan meets the intent of the following City of St. Cloud Strategic Goals:

- ***High-Performing Government:*** *Focus on the continuity and sustainability of core public services*.

DRC/Staff Recommendation

Staff reviewed this Preliminary Subdivision Plan on or before September 12, 2025. The following **informational** comments were provided:

Public Works

1. A Transportation Impact Analysis will be required to be submitted and approved prior to subdivision construction plan approval.
2. Final engineering design will be reviewed with the subdivision construction plan submittal.
3. Any improvements within the Narcoossee Road right-of-way requires Osceola County permitting.
4. The improvements shall not impact on the existing drainage patterns for the site and/or adjacent properties.
5. Please be aware of the new land development code changes regarding the filling and grading of new development along adjacent properties. The new code language can be requested from the city at public.works@stcloudfl.gov.

Osceola County School District (9/16/2025)

1. The district has a history of working closely with the County and two municipalities to alleviate school capacity issues created by expanded residential development. The School District of Osceola County reserves its right to ensure proper mitigation of any impact on school capacity and the collection of Educational System Impact Fees.
2. Harmony High is overcapacity and utilizes five (5) relocatables to accommodate its existing enrollment. A new high school has been funded and is scheduled to open for the 2026/2027 school year and will provide relief for Harmony High School. Additional capacity may be met through existing space reconfigurations, rezoning, and/or charter schools.

Staff Recommendation

Staff recommends **APPROVAL with conditions** of the Walker Property Preliminary Subdivision Plan (PSP24-00001) subject to the following conditions:

Planning Conditions:

Prior to issuance of the Certificate of Completion, the applicant will construct the 10' multi-purpose trail to extend along Chisholm Park Trail to Narcoossee Rd (the City is responsible for acquiring the necessary off-site property) as well as continue the 10' multi-purpose trail through the development (down Albany Ave to Narcoossee Road).

If construction of the 10' multi-purpose trail is not possible due to engineering constraints the developer agrees to pay the value of the necessary improvements to the City of St. Cloud for deposit into the Sidewalk Fund. The amount paid into the fund will be based upon an engineers Certified

Cost Estimate and validated by the City Engineer prior to issuance of the Certificate of Completion.

City Council Requested Action

Per Land Development Code Section 2.4.4.G – City Council Review, at its regularly scheduled meeting, the City Council shall review the Preliminary Subdivision Plan. Based on the information generated and the comments made during the development review, the City Council shall approve, disapprove or approve subject to stated conditions. Approval of the Preliminary Subdivision Plan shall authorize review for approval of the Subdivision Construction Plans by the Development Review Committee as outlined in section 2.4.5.

Attachments

- Osceola County School Capacity Report
- Walker Property Preliminary Subdivision Plan (full set of plans)

THE SCHOOL DISTRICT OF OSCEOLA COUNTY, FLORIDA

PLANNING SERVICES DEPARTMENT

SCHOOL CAPACITY REPORT - THREE YEAR OUTLOOK

UPDATED

Date:	9.16.25	**Current FLU:**	LDR
SDOC #:	2021/22-0125	**Requested FLU:**	N/A
Jurisdiction:	St. Cloud	**Current Zoning:**	R-E
DRC #:	PSP24-00001	**Requested Zoning:**	N/A
Project Name:	Walker Property	**PID:**	29-25-31-4910-0060-0070
Project Location:	Albany Ave., St. Cloud, 34771		29-25-31-4910-0051-0010
Comments Due Date:	9.16.25		29-25-31-4910-0060-0010
AC:	25.59		

If proposed project increases utilization of schools above adopted level of service, applicant will obtain a Letter of Agreement outlining an accommodation plan for the students generated by this project, consistent with the provisions of Sections 6.1. - 6.7. of the Interlocal Agreement for the Planning and Coordination of Public Schools throughout Osceola County (as required by Section 163.31777, F.S.[2012]). "The County/Cities and the applicant must collaborate with the School Board to identify available means that might be used to achieve sufficient capacity to accommodate the development, which may include, but not be limited to developer contributions, project phasing, or developer provided facility improvements." If you should have any questions please feel free to contact the Osceola School District Planning Services Department at 407-518-2964.

Total Proposed Residential Units by Type

SF	69	**TH**	0	**MF**	0
Single Family		Townhome		Multi-Family	
Condo	0	**MH**	0	**STR**	0
Condominium		Mobile Home		Short Term Rental	
HOP	0	**VV**	0	**AWH**	0
Housing for Older Persons		Vacation Villas		Affordable-Workforce Housing	

Estimated Number of New Students Generated by Proposed Development

Elem. (K-5)	10	**Middle (6-8)**	6	**High (9-12)**	10

Student Generation Calculations

Example Calculation: 100 (SF Units) x 0.178 (Elem. Rate) = 18 (Students)

Residential Categories					
Total Units	SF	TH	MF	Condo	MH
69	69	0	0	0	0

Student Generations Rates			
	Elem. (K-5)	Middle (6-8)	High (9-12)
SF	0.139	0.086	0.144
TH	0.096	0.052	0.089
MF	0.157	0.083	0.114
CONDO	0.059	0.03	0.047
MH	0.107	0.065	0.082

Total Students	
Elem (K-5)	10
Middle (6-8)	6
High (9-12)	10

Level of Service (LOS)

	2024/2025			2027/2028		
School Boundaries Impacted	COFTE	Permanent Student Capacity	Current Level of Service	3 YR. Projected COFTE	Projected COFTE w/ Impact	Projected LOS w/ Impact
NCES	798	1,452	55%	786	796	55%
NCMS	1,077	1,528	70%	1,065	1,071	70%
HRHS	2,571	2,716	95%	2,467	2,477	91%

Comments

The District has a history of working closely with the County and two municipalities to alleviate school capacity issues created by expanded residential development. The School District of Osceola County reserves its right to ensure proper mitigation of any impact on school capacity and the collection of Educational System Impact Fees.

Harmony High is overcapacity and utilizes five (5) relocatables to accommodate its existing enrollment. A new high school has been funded and is scheduled to open for the 2026/2027 school year and will provided relief for Harmony High School. Additional capacity may be met through existing space reconfigurations, rezoning, and/or charter schools.

VICINITY MAP

SECT. 32, TWP. 25 S., RNG. 30 E.



LEGAL DESCRIPTION

LOTS 1, 2, 3, 4, 15, 16, 17 AND 18, BLOCK 60, LOTS 1, 2, 3, 4 AND 5, BLOCK 62, THAT PORTION OF THE VACATED O STREET ABUTTING SAID LOTS, THE EAST ½ OF THE VACATED MASSACHUSETTS AVENUE ABUTTING SAID LOTS AND THE SOUTH ½ OF THE VACATED N STREET ABUTTING SAID LOTS OF THE TOWN OF RUNNYMEDE, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 1, PAGES 4 AND 5, OF THE PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA.

ALONG WITH:

BLOCKS 51 AND 52, THE TOWN OF RUNNYMEDE, ACCORDING TO THE OFFICIAL PLAT THEREOF AS RECORDED IN PLAT BOOK 1, PAGES 4 AND 5, PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA, TOGETHER WITH VACATED STREET BETWEEN BLOCK 51 AND 52, AND THE NORTH 1/2 OF VACATED STREET LYING SOUTH OF BLOCK 52 AND THE EAST 1/2 OF VACATED MASSACHUSETTS AVENUE LYING WEST OF SAID BLOCKS 51 AND 52.

ALONG WITH:

ALL OF BLOCK 59 AND LOTS 5–14, BLOCK 60, AND LOTS 6–10, BLOCK 62, TOGETHER WITH VACATED "O" STREET ABUTTING LOTS 10–14, BLOCK 60 AND LOTS 6–10, BLOCK 62, TOGETHER WITH NORTH HALF OF VACATED "O" STREET LYING SOUTH OF BLOCK 59, TOGETHER WITH SOUTH HALF OF VACATED "N" STREET, LYING NORTH OF BLOCK 59, TOGETHER WITH THE WEST HALF OF VACATED PENNSYLVANIA A VENUE, LYING WEST OF THE ABANDONED AMERICAN COASTLINE RAILROAD, SOUTH OF THE CENTERLINE OF "N" STREET AND NORTH OF THE CENTERLINE OF "O" STREET, TOGETHER WITH THE WEST HALF OF VACATED NEW YORK AVENUE, LYING SOUTH OF "N" STREET AND LYING NORTH OF THE EXTENSION OF THE SOUTH LINE OF LOT 10, BLOCK 62, TOGETHER WITH THE EAST HALF OF VACATED NEW YORK AVENUE, LYING SOUTH OF "N" STREET AND LYING NORTH OF THE CENTERLINE OF "O" STREET, TOWN OF RUNNYMEDE, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 1, PAGES 4 & 5, OF THE PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA.

TOGETHER WITH:

THAT PORTION OF LOT 1, BLOCK 64, AND PORTIONS OF LOT 16, BLOCK 58, AND PORTIONS OF VACATED "O" STREET AND PENNSYLVANIA A VENUE, OF THE PLAT OF THE TOWN OF RUNNYMEDE, AS RECORDED IN PLAT BOOK 1, PAGES 4 & 5, OF THE OFFICIAL RECORDS OF OSCEOLA COUNTY, FLORIDA, LYING WEST OF STATE ROAD 15, AND THAT PORTION OF ABANDONED RIGHT–OF–WAY OF KISSIMMEE–NARCOOSSEE BRANCH OF THE ATLANTIC COASTLINE RAILROAD, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCE AT THE SOUTHEAST CORNER OF BLOCK 63, OF THE TOWN OF RUNNYMEDE, AS RECORDED IN PLAT BOOK 1, PAGES 4 & 5, OF THE OFFICIAL RECORDS OF OSCEOLA COUNTY, FLORIDA; THENCE RUN SOUTH 89°50'59" EAST, A DISTANCE OF 20.00 FEET TO A POINT; THENCE RUN NORTH 00°12'31" EAST, A DISTANCE OF 298.16 FEET TO THE POINT OF BEGINNING; THENCE RUN SOUTH 89°50'59" EAST, A DISTANCE OF 217.19 FEET TO A POINT ON THE WESTERLY RIGHT–OF–WAY LINE OF STATE ROAD 15; THENCE RUN NORTH 12°17'44" WEST, ALONG THE WESTERLY RIGHT OF–WAY LINE OF STATE ROAD 15, A DISTANCE OF 100.71 FEET TO A POINT OF CURVE; THENCE WITH THE ARC OF A CURVE TO THE RIGHT, HA YING FOR ITS ELEMENTS, A RADIUS OF 5779.58 FEET, A CENTRAL ANGLE OF 00°04'40", A DISTANCE OF 7.86 FEET TO A POINT ON CURVE; THENCE RUN NORTH 89°50'59" WEST, DEPARTING SAID RIGHT–OF–WAY LINE (NON–RADIAL), A DISTANCE OF 193.69 FEET; THENCE RUN SOUTH 00°12'31" WEST, A DISTANCE OF 106.00 FEET TO THE POINT OF BEGINNING.

TOGETHER WITH AN EASEMENT FOR INGRESS AND EGRESS, FENCE MAINTENANCE, AND UTILITIES (PUBLIC OR PRIVATE, TO INCLUDE ELECTRICITY, WATER, ETC.), WHETHER OVER, UNDER, OR ACROSS THE SUBJECT PROPERTY, WHICH USES MAY BE EXPANDED AND/OR PAVED BY THE GRANTOR OR GRANTEE, TO INCLUDE THEIR SUCCESSORS, HEIRS, AND ASSIGNS, IN REGARD TO THAT CERTAIN REAL PROPERTY BEING MORE FULLY DESCRIBED AS FOLLOWS:

THE SOUTH HALF OF VACATED "N" STREET, LYING WEST OF NEW YORK AVENUE AND EAST OF MASSACHUSETTS AVENUE, TOWN OF RUNNYMEDE, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 1, PAGES 4 & 5, OF THE PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA.

PRELIMINARY SUBDIVISION PLAN

FOR

WALKER PROPERTY

ALBANY AVENUE, ST. CLOUD, FL

HOME DYNAMICS CORPORATION

DAVID SCHACK
4755 TECHNOLOGY WAY
BOCA RATON, FL 33431

DRAWING INDEX

SHEET	SHEET NAME	REV	DATE
C0.001	COVER SHEET		11/04/2022
C0.002	EXISTING TOPOGRAPHY		11/04/2022
C1.001	PRELIMINARY SITE PLAN		11/04/2022
C2.001	PRELIMINANY TRAFFIC CIRCULATION PLAN		11/04/2022
C3.001	PRELIMINANY UTILITY PLAN		11/04/2022
C4.001	EXISTING CONDITIONS PLAN		11/04/2022

SITE DATA

PROPERTY LOCATION :
THE PROJECT IS LOCATED WEST OF S. NARCOOSSEE ROAD AND SOUTH OF CHISHOLM PARK TRAIL.

PARCEL NUMBERS :
29–25–31–4910–0051–0010
29–25–31–4910–0060–0070
29–25–31–4910–0060–0010

Property Acreage:
Onsite Project Area = 25.59 acres
Open Space = 5.21ac
Density = 2.70 du/ac

Design Standards:
Minimum Lot area = 7,500 sf
Minimum Lot Width = 62.5 FT
Maximum Allowable Building Height = Two Stories 35Ft
Maximum Lot Imperviousness = 75%
Proposed Zoning: PUD Land Use: LDR
Minimum centerline radius: 50 Ft

Setbacks:
Minimum front yard setback for front entry garage = 25 Ft
Minimum Front yard setback for covered front porch = 10 Ft
Minimum Front Yard Setback for A/C portion of Building = 20 FT
Minimum Lot frontage = 35 Ft
Minimum Air Conditioned Living Area = 1,500sf
Minimum side yard setback for Primary or accessory structures = 5 Ft
Minimum Corner Lot side setback for Primary or accessory structures = 15 Ft
Minimum rear yard setback for Primary or accessory structures = 15 Ft
*All other setbacks for accessory structures, except as noted above, shall be governed by the Land Development Code

Proposed Uses:
69 single family detached residential units

Parking Calculations:
Parking Required:
69 Single family units @ 4.5 per unit = 310.5 Spaces

Parking Provided: 4 Spaces per detached Unit on property = 276 spaces
On Street Parking = 35 spaces
Total = 311 spaces

SOILS:
ACCORDING TO THE SOIL SURVEY OF OSCEOLA COUNTY, FLORIDA THIS PROPERTY CONSISTS OF POMELLO FINE SAND AND ST LUCIE FINE SAND.

FLOOD STATEMENT:
PER FEMA COMMUNITY PANEL NUMBER 12097C0115G EFFECTIVE JUNE 18, 2013, THE SITE LIES WITHIN ZONE X (WHITE) AREAS DETERMINED TO BE OUTSIDE OF THE 500 YEAR FLOOD PLAIN

TRAFFIC STATEMENT:
PER ITE 9TH EDITION, THIS SITE WILL GENERATE 714 AVERAGE DAILY TRIPS AND 75 PEAK HOUR TRIPS BASED ON USE 210.

LANDSCAPE & IRRIGATION:
A LANDSCAPE & IRRIGATION PLAN MEETING THE COUNTY/CITY L.D.C. WILL BE SUBMITTED WITH THE FINAL ENGINEERING PLANS.

PROJECT TEAM

CIVIL ENGINEERS/PLANNERS:

OSCEOLA ENGINEERING INCORPORATED
CERTIFICATE OF AUTHORIZATION NUMBER: 00026265
1003 FLORIDA AVENUE, SAINT CLOUD, FL 34769
PHONE 407.891.0452 FAX 407.891.9173

SURVEYORS:

JOHNSTON'S SURVEYING INC.
900 Cross Prairie Parkway, Kissimmee, Florida 34744
(407) 847–2179 ● Fax (407) 847–6140

UTILITY COORDINATION

CALL 48 HOURS BEFORE YOU DIG IN FLORIDA
It's the Law!
811 or 1-800-432-4770
Sunshine State One Call of Florida, Inc.
http://www.callsunshine.com/corp/index.html

OSCEOLA ENGINEERING INCORPORATED
CERTIFICATE OF AUTHORIZATION NUMBER: 00026265
1003 FLORIDA AVENUE, SAINT CLOUD, FL 34769
PHONE 407.891.0452 FAX 407.891.9173

UTILITY PROVIDERS

WATER & SEWER SERVICES
TOHO WATER AUTHORITY
1300 9th STREET
ST. CLOUD, FL 34769
Phone: (407) 957–7344

DRAINAGE
OSCEOLA COUNTY
1 Courthouse Square, Suite 1100,
Kissimmee, FL 34741
Phone: (407) 343–2600

ELECTRICITY
OUC
1300 9th STREET
ST. CLOUD, FL 34769
Phone: (407) 957–7344

TELEPHONE
CENTURY LINK
33 N. MAIN STREET
WINTER GARDEN, FL 34787
Phone: (407) 814–5344

PSP24-00001

OEI 22.028
WALKER PROPERTY

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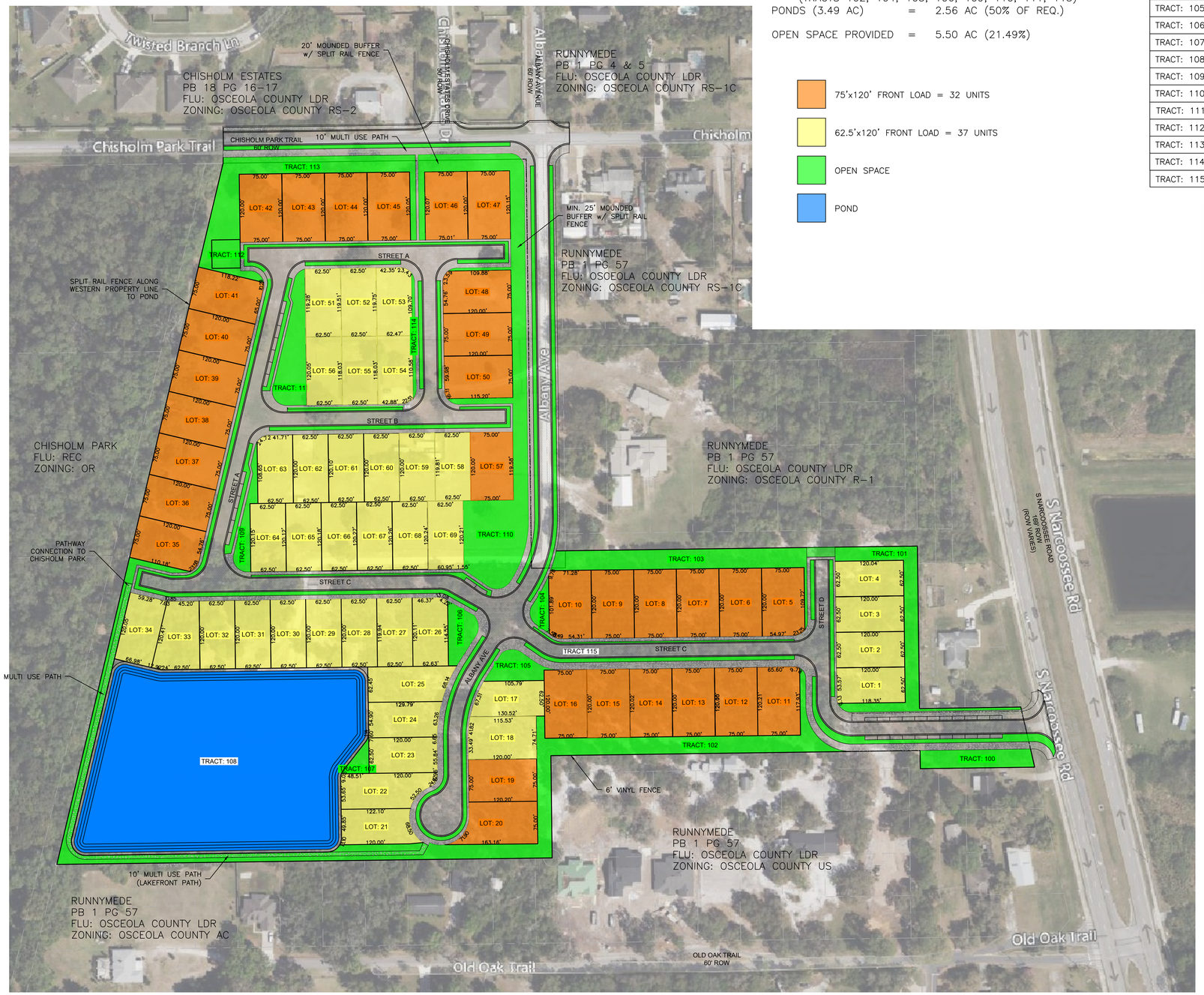


OPEN SPACE CALCULATIONS
PROPOSED DEVELOPMENT

PROPERTY AREA	=	25.59 AC
20% REQUIRED	=	5.12 AC
OPEN SPACE	=	2.94 AC
(TRACTS 102, 104, 105, 106, 109, 110, 111, 113)		
PONDS (3.49 AC)	=	2.56 AC (50% OF REQ.)
OPEN SPACE PROVIDED	=	5.50 AC (21.49%)

75'x120' FRONT LOAD = 32 UNITS

62.5'x120' FRONT LOAD = 37 UNITS

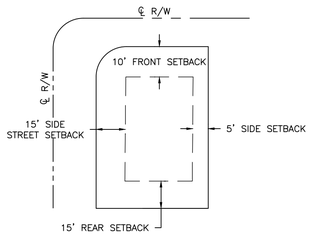
OPEN SPACE

POND

Tract Table

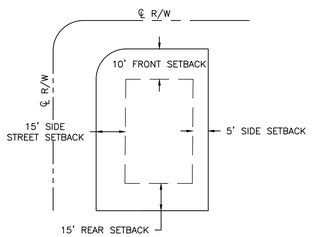
Tract	Area (AC)	Purpose	Prop. Ownership	Prop. Maintenance
TRACT: 100	0.145	OPEN SPACE	HOA	HOA
TRACT: 101	0.297	OPEN SPACE	HOA	HOA
TRACT: 102	1.105	OPEN SPACE	HOA	HOA
TRACT: 103	0.369	OPEN SPACE	HOA	HOA
TRACT: 104	0.045	OPEN SPACE	HOA	HOA
TRACT: 105	0.094	OPEN SPACE	HOA	HOA
TRACT: 106	0.094	POND	HOA	HOA
TRACT: 107	0.036	OPEN SPACE	HOA	HOA
TRACT: 108	3.485	OPEN SPACE	HOA	HOA
TRACT: 109	0.085	OPEN SPACE	HOA	HOA
TRACT: 110	0.878	OPEN SPACE	HOA	HOA
TRACT: 111	0.206	OPEN SPACE	HOA	HOA
TRACT: 112	0.057	LIFT STATION	TOHO WATER	TOHO WATER
TRACT: 113	0.432	OPEN SPACE	HOA	HOA
TRACT: 114	0.025	OPEN SPACE	HOA	HOA
TRACT: 115	6.970	ROW	CITY OF ST CLOUD	CITY OF ST CLOUD

6.970	TOTAL ROW
3.485	TOTAL POND
3.69	TOTAL OPEN SPACE
11.45	TOTAL RESIDENTIAL
25.59	TOTAL



62.5' FRONT LOAD
SINGLE FAMILY BUILDING
SETBACK DETAIL

FRONT GARAGE	=	25 FT
FRONT PORCH	=	10 FT
FRONT A/C PORTION OF BUILDING	=	20 FT
REAR	=	15 FT.
SIDE	=	5 FT.
SIDE STREET	=	15 FT.



75' FRONT LOAD
SINGLE FAMILY BUILDING
SETBACK DETAIL

FRONT GARAGE	=	25 FT
FRONT PORCH	=	10 FT
FRONT A/C PORTION OF BUILDING	=	20 FT
REAR	=	15 FT.
SIDE	=	5 FT.
SIDE STREET	=	15 FT.

PS24-00001

OSCEOLA ENGINEERING INCORPORATED

civil engineers

environmental engineers

landscape architects

& land planners

address:

osceola engineering incorporated
1003 florida avenue
city of saint cloud
florida 34769
telephone: (407) 891-0452
facsimile: (407) 891-9173

project:

Walker Property

drawing:

Preliminary Site Plan

location:

PIN
29-25-31-4910-0051-0010
29-25-31-4910-0060-0010
29-25-31-4910-0060-0070

ADDRESS
St Cloud, FL 34771

North

0 100' 200'

Scale: 1" = 100'

Date: September 10, 2024

sheet:

C1.001

file: M:\2022\22-028 Walker Property\Cadd\Development Plans\PSP\22-028 C1.001 PSP MSP.dwg

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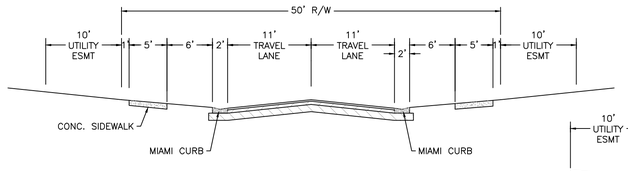
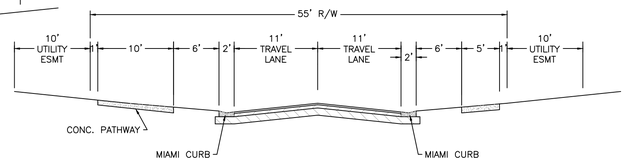
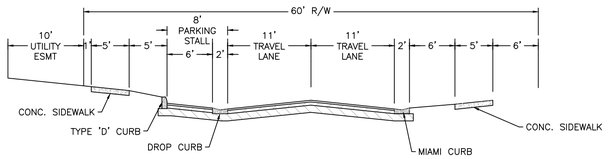


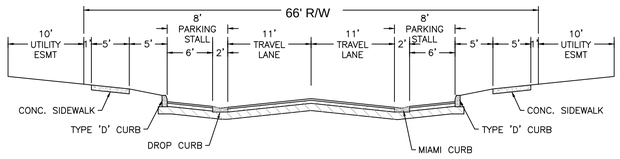
A/A LOCAL ROAD (25 MPH)



A2/A2 LOCAL ROAD (25 MPH)



B/B LOCAL ROAD - PARKING ONE SIDE (25 MPH)



C/C LOCAL ROAD - PARKING BOTH SIDES (25 MPH)



OSCEOLA ENGINEERING INCORPORATED

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landscape architects

& land planners

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1003 florida avenue
city of saint cloud
florida 34769
telephone: (407) 891-0452
facsimile: (407) 891-9173

project:

Walker Property

drawing:

Preliminary Traffic Circulation Plan

location:

PIN
29-25-31-4910-0051-0010
29-25-31-4910-0060-0010
29-25-31-4910-0060-0070

ADDRESS
St Cloud, FL 34771

North

0 100' 200'

Scale: 1" = 100'

Date: September 10, 2024

sheet:

C2.001

file: M:\2022\22-028 Walker Property\Cadd\Development Plans\PSP\22-028 C2.001 PSP TRAFFIC.dwg

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PS24-00001



LEGEND

WM		8" PVC C900/DR18 WATER MAIN
RM		6" PVC C900/DR18 REUSE MAIN
FM		4" PVC C900/DR18 FORCE MAIN
SS		8" PVC SDR26 GRAVITY SEWER

NOTES:
1. ALL MAINS SHALL HAVE A MINIMUM OF 36" COVER

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facsimile: (407) 891-9173

project:

Walker Property

drawing:

Preliminary Utility Plan

location:

PIN
29-25-31-4910-0051-0010
29-25-31-4910-0060-0010
29-25-31-4910-0060-0070

ADDRESS
St Cloud, FL 34771

North

0 80' 160'

Scale: 1" = 80'

Date: September 10, 2024

sheet:

C3.001

file: M:\2022\22-028 Walker Property\Cadd\Development Plans\PSP\22-028 C3.001 PSP UTIL.dwg

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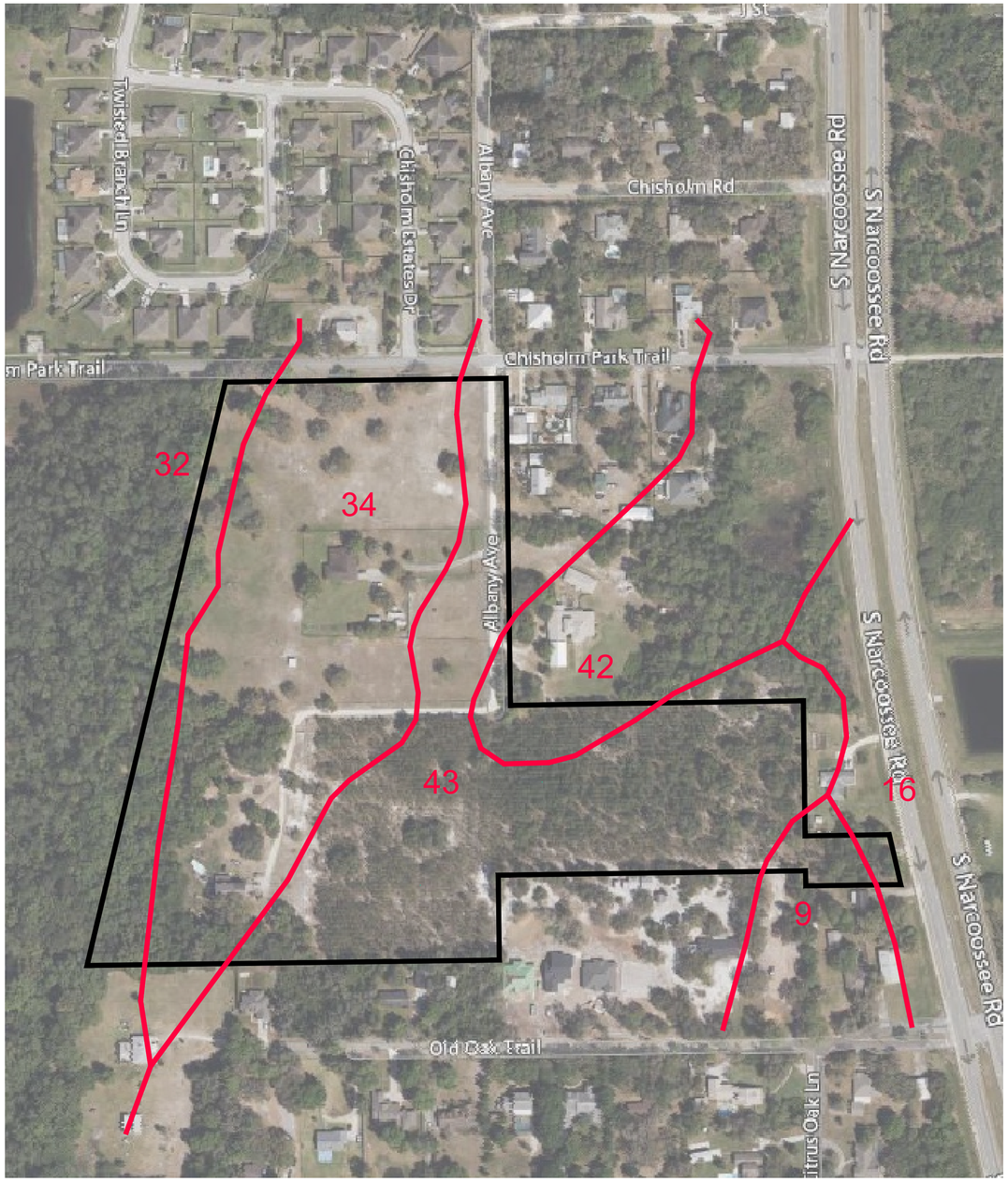
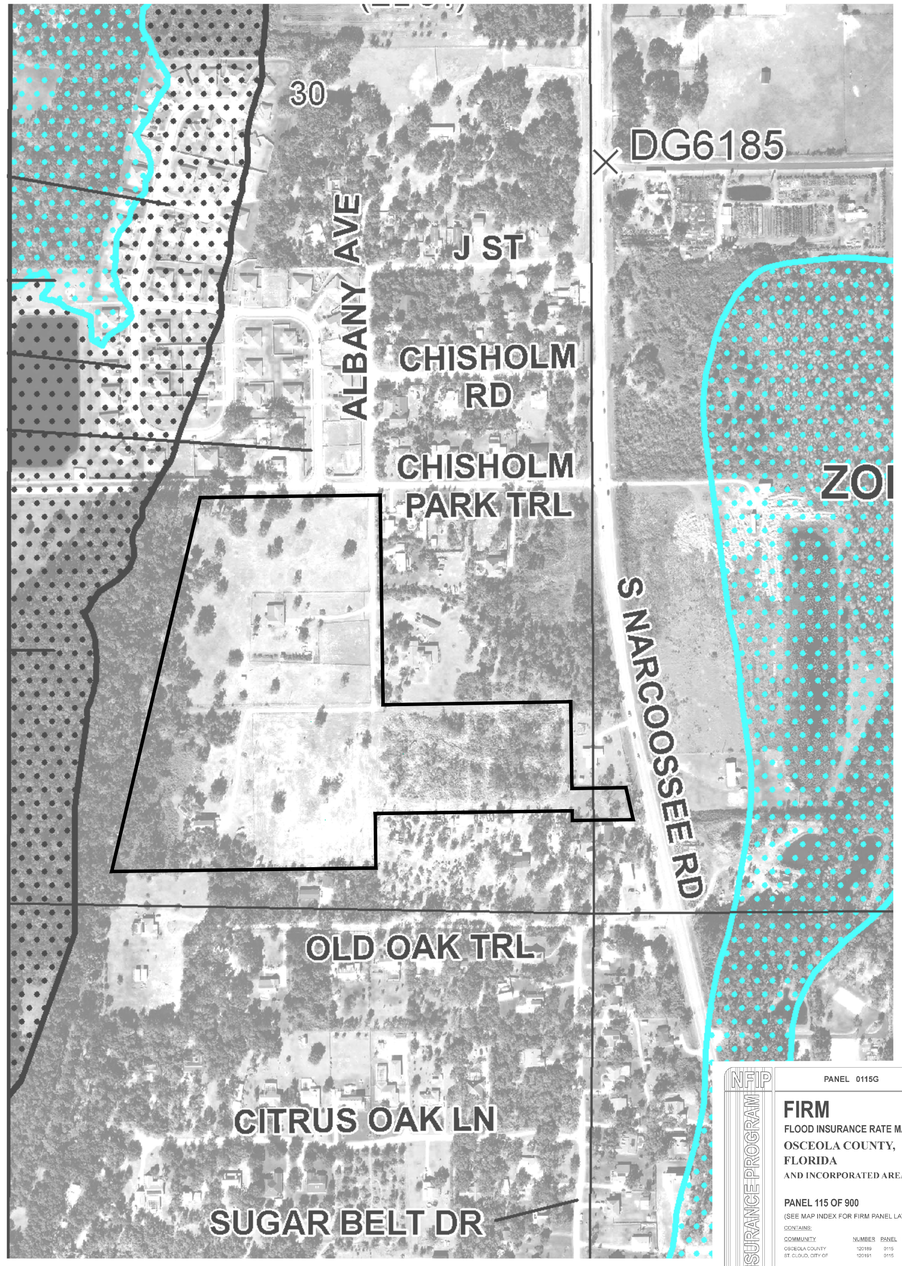


SOILS MAP
1" = 150"

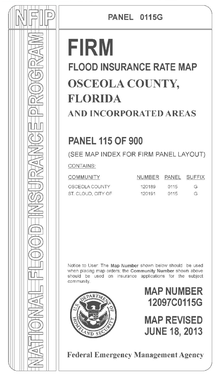
LEGEND

Soil No.	Soil Name
9	Cassia Fine Sand
16	Immokalee Fine Sane
6	Basinger Fine Sand, Depression
16	Imookalee Fine Sand
32	Placid Fine Sand
34	Pomello Fine Sand
42	Symrna Fine Sand
43	St. Lucie Fine Sand
44	Tavares Fine Sand

Soil Survey for Osceola County



FEMA FLOOD MAP
1" = 250"


NFIP
PANEL 0115G
FIRM
FLOOD INSURANCE RATE MAP
OSCEOLA COUNTY, FLORIDA
AND INCORPORATED AREAS
PANEL 115 OF 900
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)
CONTAINS:
COMMUNITY NUMBER PANEL SUFFIX
OSCEOLA COUNTY 120189 0115 G
ST. CLOUD, CITY OF 120191 0115 G
Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.
MAP NUMBER
12097C0115G
MAP REVISED
JUNE 18, 2013
Federal Emergency Management Agency
NATIONAL FLOOD INSURANCE PROGRAM

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project:

Walker Property

drawing:

Existing Conditions Plan

location:

PIN
29-25-31-4910-0051-0010
29-25-31-4910-0060-0010
29-25-31-4910-0060-0070
ADDRESS
St Cloud, FL 34771

North
0 80' 160'
Scale: 1" = 80'
Date: September 10, 2024

sheet:

C4.001

file: M:\2022\22-028 Walker Property\Cadd\Development Plans\PSP\22-028 C4.001 PSP EXIST.dwg

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PS24-00001

Meeting: November 13, 2025

Agenda Item Type: Consent Agenda Old Hickory Tree Estates Preliminary Subdivision Plan for Old Hickory Tree Estates (fka Vista Grand Properties)

Community Development Agenda Item:
Request City Council's approval of Old Hickory Tree Estates Preliminary Subdivision Plan for Old Hickory Tree Estates (fka Vista Grand Properties), PSP25-00003
COST: No cost is associated with this item.
This item is to approve the Preliminary Subdivision Plan for Old Hickory Tree Estates (fka Vista Grand Properties), which contains 54 single-family detached dwelling units on approximately +/- 14.36 acres of land, generally located north of Gramercy Farms Boulevard, east of Old Hickory Tree Road, west of Hickory Tree Road, and south of Nolte Road.

Strategic Key Focus Areas:
High-Performing Government

Background Information:
The subject property is generally located northeast of Old Hickory Tree Road, west of Hickory Tree Road, and south of Nolte Road. The subject property is assigned a "PUD" Planned Unit Development zoning district and a Future Land Use designation of Low Density Residential.

In accordance with the City of St. Cloud's Comprehensive Plan, the Low-Density Residential Future Land Use designation permits a maximum density of 4.0 dwelling units per acre. This Preliminary Subdivision Plan is consistent with the proposed standards set forth within their PUD ordinance (Ordinance No. 2024-27), the existing Low Density Residential Future Land Use and adheres to all standards defined within the Land Development Code.

The proposed development includes the construction of 54 single-family detached units with 28 rear-loaded lots (40ft x 110ft) and 26 front-loaded lots (55ft x 110ft).

Legal Authority:
Per Land Development Code Section 2.4.4.G – City Council Review, at its regularly scheduled meeting, the City Council shall review the Preliminary Subdivision Plan. Based on the information generated and the comments made during the development review, the City Council shall approve, disapprove or approve subject to stated conditions. Approval of the Preliminary Subdivision Plan shall authorize review for approval of the Subdivision Construction Plans by the Development Review Committee as outlined in section 2.4.5.

Budget and Recommendation:
There is no cost associated with this item.

Staff reviewed this Preliminary Subdivision Plan on or before October 31, 2025 and recommends **APPROVAL** of the Old Hickory Tree Estates Preliminary Subdivision Plan (PSP25-00003).

Finance Director's Comments:
N/A

Procurement Director's Comments:
N/A

City Manager's Comments:
City Manager recommends approval

City Council Action:
11/13/25 - Final Action

Attachments:
1. 1. PSP25-00003 Old Hickory Tree Estates (FKA Vista Grande) Staff Report 11.13.25 CC
2. 2. PSP25-00003 Old Hickory Tree Estates School Capacity Report 11.13.25 CC
3. 3. PSP25-00003 Old Hickory Tree Estates PLANS.10172025
4. 4. PSP25-00003 Old Hickory Tree Estates TIA.10172025

City Council Staff Report
Meeting Date: November 13, 2025

DRC Case No. /Ord. No.
PSP25-00003

Type of Application
Preliminary Subdivision Plan

Case Name
Old Hickory Tree Estates

Applicant/Agent
Vista Grande Properties, LLC / Stonebridge Development, LLC

Owner(s)
Same as applicant

Address/Location
North and East of Old Hickory Tree Rd, West of Hickory Tree Rd, and South of Nolte Rd

Parcel ID No.
19-26-31-4950-0001-0020 / 19-26-31-4950-0001-0155 / 19-26-31-4950-0001-0150 / 19-26-31-4950-0001-0180

Total Land Area
+/- 14.36 acres

Project Planner
Stephanie Streeter
Senior Planner

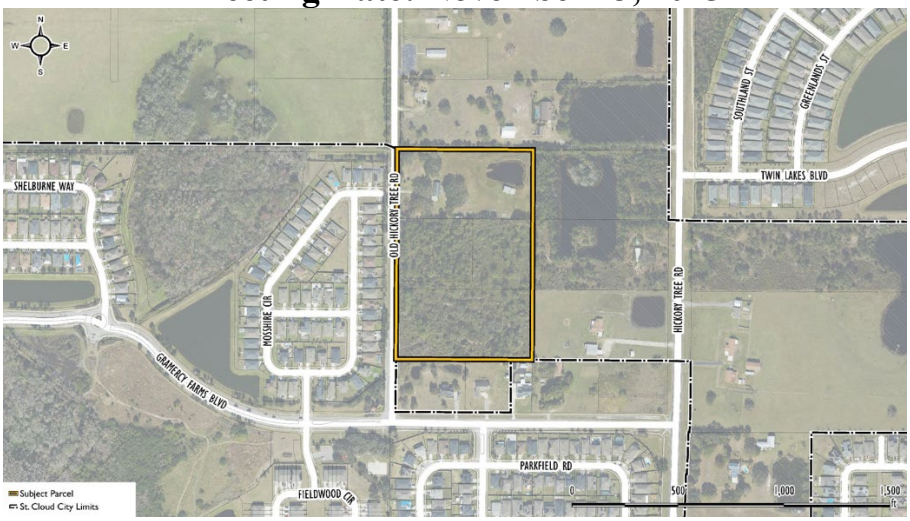


Figure 1 – Aerial Map

Request

The applicant is requesting approval of a Preliminary Subdivision Plan (PSP) of single-family residential detached lots on approximately +/- 14.36 acres of land known as Old Hickory Tree Estates. The subject property is shown in **Figure 1** above.

Background

The subject property is generally located northeast of Old Hickory Tree Rd, west of Hickory Tree Rd, and south of Nolte Rd. The subject property is assigned a "PUD" Planned Unit Development zoning district and a Future Land Use designation of Low Density Residential.

In accordance with the City of St. Cloud's Comprehensive Plan, the Low-Density Residential Future Land Use designation permits a maximum density of 4.0 dwelling units per acre. This Preliminary Subdivision Plan is consistent with the proposed standards set forth within their PUD ordinance (Ordinance No. 2024-27), the existing Low Density Residential Future Land Use and adheres to all standards defined within the Land Development Code.

The proposed development includes the construction of 54 single-family detached units with 28 rear-loaded lots (40ft x 110ft) and 26 front-loaded lots (55ft x 110ft).

Consistency With Strategic Plan Goals

The proposed Preliminary Subdivision Plan meets the intent of the following City of St. Cloud Strategic Goals:

- ***High-Performing Government:*** *Focus on the continuity and sustainability of core public services*.

Staff Recommendation

Staff reviewed this Preliminary Subdivision Plan on or before October 31, 2025 and recommends **APPROVAL** of the Old Hickory Tree Estates Preliminary Subdivision Plan (PSP25-00003).

City Council Requested Action

Per Land Development Code Section 2.4.4.G – City Council Review, at its regularly scheduled meeting, the City Council shall review the Preliminary Subdivision Plan. Based on the information generated and the comments made during the development review, the City Council shall approve, disapprove or approve subject to stated conditions. Approval of the Preliminary Subdivision Plan shall authorize review for approval of the Subdivision Construction Plans by the Development Review Committee as outlined in section 2.4.5.

Attachments

- Osceola County School Capacity Report
- Old Hickory Tree Estates Preliminary Subdivision Plans
- Traffic Impact Analysis

THE SCHOOL DISTRICT OF OSCEOLA COUNTY, FLORIDA

PLANNING SERVICES DEPARTMENT

SCHOOL CAPACITY REPORT - THREE YEAR OUTLOOK

Date:	8.13.25	**Current FLU:**	LDR
SDOC #:	2023/24-0066	**Requested FLU:**	N/A
Jurisdiction:	St. Cloud	**Current Zoning:**	PUD
DRC #:	PSP25-00003	**Requested Zoning:**	N/A
Project Name:	Old Hickory Tree Estates	**PID:**	19-26-31-4950-0001-0020
Project Location:	2975 Old Hickory Tree Rd., St. Cloud, 34772		19-26-31-4950-0001-0150
Comments Due Date:	8.18.25		19-26-31-4950-0001-0155
AC:	14.36		19-26-31-4950-0001-0180

If proposed project increases utilization of schools above adopted level of service, applicant will obtain a Letter of Agreement outlining an accommodation plan for the students generated by this project, consistent with the provisions of Sections 6.1. - 6.7. of the Interlocal Agreement for the Planning and Coordination of Public Schools throughout Osceola County (as required by Section 163.31777, F.S.[2012]). "The County/Cities and the applicant must collaborate with the School Board to identify available means that might be used to achieve sufficient capacity to accommodate the development, which may include, but not be limited to developer contributions, project phasing, or developer provided facility improvements." If you should have any questions please feel free to contact the Osceola School District Planning Services Department at 407-518-2964.

Total Proposed Residential Units by Type

SF	54	**TH**	0	**MF**	0
Single Family		Townhome		Multi-Family	
Condo	0	**MH**	0	**STR**	0
Condominium		Mobile Home		Short Term Rental	
HOP	0	**VV**	0	**AWH**	0
Housing for Older Persons		Vacation Villas		Affordable-Workforce Housing	

Estimated Number of New Students Generated by Proposed Development

Elem. (K-5)	8	**Middle (6-8)**	5	**High (9-12)**	8

Student Generation Calculations

Example Calculation: 100 (SF Units) x 0.178 (Elem. Rate) = 18 (Students)

Residential Categories					
Total Units	SF	TH	MF	Condo	MH
54	54	0	0	0	0

Student Generations Rates			
	Elem. (K-5)	Middle (6-8)	High (9-12)
SF	0.139	0.086	0.144
TH	0.096	0.052	0.089
MF	0.157	0.083	0.114
CONDO	0.059	0.03	0.047
MH	0.107	0.065	0.082

Total Students	
Elem (K-5)	8
Middle (6-8)	5
High (9-12)	8

Level of Service (LOS)

	2024/2025			2027/2028		
School Boundaries Impacted	COFTE	Permanent Student Capacity	Current Level of Service	3 YR. Projected COFTE	Projected COFTE w/ Impact	Projected LOS w/ Impact
HTES	1,017	1,174	87%	1,002	1,399	119%
HRMS	1,085	1,286	84%	1,073	1,493	116%
HRHS	2,571	2,716	95%	2,467	3,840	141%

Comments

The District has a history of working closely with the County and two municipalities to alleviate school capacity issues created by expanded residential development. The School District of Osceola County reserves its right to ensure proper mitigation of any impact on school capacity and the collection of Educational System Impact Fees.

Hickory Tree Elementary - Capacity may be met through space reconfigurations, redistricting and/or charter schools. A proposed new K-8 school is planned and funded to provide relief to Hickory Tree Elementary School.

Harmony Middle - Capacity may be met through space reconfigurations, redistricting and/or charter schools. A proposed new K-8 school is planned and funded to provide relief to Harmony Middle School.

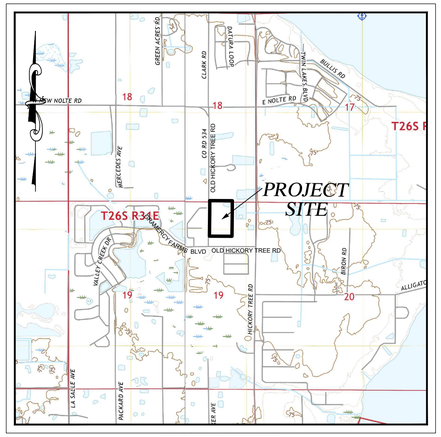
PRELIMINARY SUBDIVISION PLANS
FOR
OLD HICKORY TREE ESTATES
SECTION 19, TOWNSHIP 26S, RANGE 31E, CITY OF ST. CLOUD, OSCEOLA COUNTY, FLORIDA

UTILITY ASSETS TABLE

SANITARY SEWER		POTABLE WATER MAIN	
GRAVITY MAINS		MAINS	
8" SDR-35 PVC	1,964 LF	8" DR18 (C900) PVC	3,314 LF
10" DR11 HDPE	24.5 LF	6" DR18 (C900) PVC	692 LF
TOTAL	1,988.5 LF	TOTAL	4,006 LF
MANHOLES		GATE VALVES	
4' DIA STANDARD CONC.	5 EA	8"	23 EA
4' DIA POLYMER CONC.	4 EA	6"	3 EA
5' DIA POLYMER CONC.	1 EA	FIRE HYDRANTS	5 EA
5' DIA POLYMER CONC. w/ DROP	1 EA	DOUBLE POTABLE SERVICES	23 EA
TOTAL	11 EA	SINGLE POTABLE SERVICES	10 EA
FORCE MAINS		**RECLAIMED WATER MAIN**	
4" DR25 (C900) PVC	661 LF	MAINS	
4" DR11 (C906) HDPE	185 LF	4" DR18 (C900) PVC	2,729 LF
TOTAL	846 LF	8" DR18 (C900) PVC	2,593 LF
4" GATE VALVES	4 EA	TOTAL	5,322 LF
AIR RELEASE VALVES	2 EA	GATE VALVES	
DOUBLE SANITARY LATERALS	23 EA	8"	4 EA
SINGLE SANITARY LATERALS	9 EA	4"	17 EA
		DOUBLE RECLAIMED SERVICES	23 EA
		SINGLE RECLAIMED SERVICES	12 EA



AERIAL MAP
SCALE 1" = 2000' REF: AUTODESK



VICINITY MAP
SCALE 1" = 2000' REF: USGS

SHEET INDEX

SHEET #	SHEET TITLE
	CIVIL SET
01	COVER SHEET
02	GENERAL NOTES
03	PRE-DEVELOPMENT, EROSION AND DUST ABATEMENT PLAN
04	AERIAL OVERLAY PLAN
05	GEOMETRY PLAN
06	GRADING AND DRAINAGE PLAN
07	MASTER UTILITY PLAN
08	UTILITY PLAN
09	SIGNAGE, MARKING, AND LIGHTING PLAN
10-14	OFFSITE UTILITY PLAN 1-5
15	OFFSITE IMPROVEMENTS OLD HICKORY TREE ROAD
16-17	OLD HICKORY TREE ROAD CROSS-SECTIONS
18	PLAN & PROFILE STREET A
19	PLAN & PROFILE STREET B
20	PLAN & PROFILE STREET C & ALLEY E
21	PLAN & PROFILE ALLEY D
22	SITE CROSS-SECTION A-A
23	SITE CROSS-SECTION B-B
24	SITE CROSS-SECTIONS C-C, D-D, AND E-E
25-27	CITY OF ST. CLOUD NOTES AND DETAILS
28	TOHO WATER AUTHORITY GENERAL NOTES
29-31	TOHO WATER AUTHORITY WATER DETAILS
32	TOHO WATER AUTHORITY SEWER DETAILS
33-39	TOHO WATER AUTHORITY LIFT STATION DETAILS
	IRRIGATION AND LANDSCAPE SET
LI001	IRRIGATION SCHEDULES
LI002-LI003	IRRIGATION NOTES
LI101-LI105	IRRIGATION PLAN
LI201-LI202	IRRIGATION DETAILS
LP001	LANDSCAPE REQUIREMENTS & PLANT SCHEDULE
LP002	TREE REMOVAL PLAN
LP003	LANDSCAPE NOTES
LP101-LP105	LANDSCAPE PLAN
LP201	LANDSCAPE INSTALLATION DETAILS
LS101	INTERNAL STREET TREE PLAN
LC5-IRC1	TEP EXHIBIT LC5 & IRC1
	SURVEY
01	ALTA/NSPS LAND TITLE SURVEY
02	TOPOGRAPHIC SURVEY
03	TREE SURVEY

LEGAL DESCRIPTION (PROVIDED BY SURVEYOR)

A PARCEL OF LAND BEING LOTS 2, 15, AND 18 OF THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION, PLAT BOOK B, PAGE 25, AND LYING IN SECTION 19, TOWNSHIP 26 SOUTH, RANGE 31 EAST, OSCEOLA COUNTY, FLORIDA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT BEING THE NORTHWEST CORNER OF SAID LOT 15, SAID POINT BEING IN THE EAST RIGHT OF WAY LINE OF OLD HICKORY TREE ROAD; RUN THENCE ALONG SAID EAST RIGHT OF WAY LINE, N.00°15'35"E., A DISTANCE OF 331.68 FEET TO THE NORTHWEST CORNER OF AFORESAID LOT 2; THENCE LEAVING SAID EAST RIGHT OF WAY LINE ALONG THE NORTH BOUNDARY OF SAID LOT 2, S.89°37'03"E., A DISTANCE OF 629.89 FEET TO THE NORTHEAST CORNER OF SAID LOT 2; RUN THENCE ALONG THE EAST BOUNDARY OF SAID LOT 2, S.00°15'35"W., A DISTANCE OF 331.68 FEET TO THE SOUTHEAST CORNER OF SAID LOT 2; RUN THENCE ALONG THE EAST BOUNDARY OF AFORESAID LOTS 15 AND 18, S.00°36'42"W., A DISTANCE OF 661.71 FEET TO THE SOUTHEAST CORNER OF SAID LOT 18; THENCE ALONG THE SOUTH BOUNDARY OF SAID LOT 18, N.89°37'03"W., A DISTANCE OF 629.89 FEET TO A POINT BEING THE SOUTHWEST CORNER OF SAID LOT 18, SAID POINT BEING IN THE AFORESAID EAST RIGHT OF WAY LINE OF OLD HICKORY TREE RD.; THENCE ALONG SAID EAST RIGHT OF WAY LINE OF OLD HICKORY TREE RD., N.00°36'42"E., A DISTANCE OF 661.71 FEET TO THE POINT OF BEGINNING.

CONTAINING 14.365 ACRES MORE OR LESS.

PROJECT TEAM

APPLICANT/DEVELOPER	CIVIL ENGINEER
STONEBRIDGE DEVELOPMENT, LLC 4327 SOUTH US HIGHWAY 27, SUITE 607 CLERMONT, FLORIDA 34711 (850) 321-4774 andrew.matella@gmail.com CONTACT: ANDREW MATELLA	KNIGHT ENGINEERING SERVICES, INC. 770 ALMOND STREET, SUITE B CLERMONT, FLORIDA 34711 (352) 394-8514 tknight@knighteng.com CONTACT: TOM KNIGHT
LAND SURVEYOR	**LAND PLANNER**
GEOPOINT SURVEYING, INC. 555 WINDERLY PLACE, SUITE 120 MAITLAND, FLORIDA 32751 (321) 270-0440 CONTACT: MATT CHEPOLIS	RJ WHIDDEN AND ASSOCIATES, INC. 316 CHURCH STREET KISSIMMEE, FLORIDA 34741 (407) 846-1880 CONTACT: JOHN RYAN ADAMS
LANDSCAPE ARCHITECT	**ENVIRONMENTAL SPECIALIST**
NFC LANDSCAPE ARCHITECTS, INC. 611 NORTH MILLS AVEENUE #536433 ORLANDO, FLORIDA 32853 (321) 388-4781 CONTACT: KARINA VEAUDRY	BIO-TECH CONSULTING, INC. 3025 E SOUTH STREET ORLANDO, FLORIDA 32803 (407) 894-5969 CONTACT: NATHAN JOHNSON
CONSULTING ENGINEER - TRAFFIC	**CONSULTING ENGINEER - LIGHTING**
TRAFFIC PLANNING AND DESIGN, INC. 535 VERSAILLES DRIVE MAITLAND, FLORIDA 32751 (407) 628-9955 CONTACT: TURGUT DERVISH	BOBES ASSOCIATES CONSULTING ENGINEERS, INC. 150 CIRCLE DRIVE MAITLAND, FLORIDA 32751 (407) 628-0882 CONTACT: GUS BOBES JR., P.E.

UTILITY SERVICE PROVIDERS

POTABLE WATER	ELECTRIC
TOHO WATER AUTHORITY 951 MARTIN LUTHER KING JR. BOULEVARD KISSIMMEE, FLORIDA 34741 (407) 944-5000	OUC ELECTRIC 5003 PERSHING AVENUE ORLANDO, FLORIDA 32822 (407) 384-4100
SANITARY SEWER	**RECLAIMED WATER**
TOHO WATER AUTHORITY 951 MARTIN LUTHER KING JR. BOULEVARD KISSIMMEE, FLORIDA 34741 (407) 944-5000	TOHO WATER AUTHORITY 951 MARTIN LUTHER KING JR. BOULEVARD KISSIMMEE, FLORIDA 34741 (407) 944-5000

SITE DATA

GENERAL INFORMATION	CHARACTERISTICS
ALTKEYS.....1094637 1094638 1094639 1094642	GROSS PROPERTY AREA ..14.36 ACRES 625,717.87 SQ. FT.
PARCEL IDS....19-26-31-4950-0001-0020 19-26-31-4950-0001-0150 19-26-31-4950-0001-0155 19-26-31-4950-0001-0180	PROPOSED NUMBER OF LOTS ..... 54 MAX. GROSS DENSITY.....10 D.U./AC. PROP. GROSS DENSITY.....3.76 D.U./AC. MINIMUM OPEN SPACE.....20.00% PROVIDED OPEN SPACE.....30.08% MAX. BUILDING HEIGHT ..... 35 FEET (2 STORY)
MUNICIPALITY.....CITY OF ST. CLOUD ZONING.....PLANNED UNIT DEVELOPMENT FLU ..... LOW DENSITY RESIDENTIAL EXISTING USE.....SINGLE FAMILY/VACANT RES. TOTAL NUMBER OF PHASES.....1	MAX. LOT COVERAGE.....65.00% LANDSCAPE BUFFERS: NORTH.....15 FEET SOUTH.....15 FEET EAST.....15 FEET WEST.....15 FEET

LAND USES TABLE

ID	LAND USE	AREA (AC.)	AREA (SQ. FT.)
LOTS	RESIDENTIAL AREA	6.55	285,614.60
R.O.W.	PUBLIC RIGHT-OF-WAY	3.41	148,433.13
TRACT A	OPEN SPACE (BUFFER)	0.31	13,575.01
TRACT B	OPEN SPACE (BUFFER)	0.31	13,618.30
TRACT C	OPEN SPACE (STORMWATER, REC, BUFFER)	3.05	132,715.39
TRACT D	OPEN SPACE (AMENITY CENTER)	0.32	13,750.00
TRACT E	OPEN SPACE (BUFFER)	0.33	14,411.44
TRACT F	PUBLIC UTILITY (LIFT STATION)	0.08	3,600.00
TOTAL		14.36	625,717.87

DATE	REVISION
Oct. 2025	Revised Per St. Cloud comments dated 9-5-2025

Knight Engineering Services
Certificate of Authorization No. 00029972
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont Florida 34711
Phone (352) 394-8514

SHEET NUMBER
01

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Thomas L. Knight, PE, on October 15, 2025.

Signature must be verified on any electronic copies.

PRELIMINARY SUBDIVISION PLANS FOR OLD HICKORY TREE ESTATES

811 Know what's below. Call before you dig.

NOTE: ALL ELEVATIONS SHOWN ON THESE PLANS ARE NAVD88

OSCEOLA COUNTY NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH AND CONFORM TO THE MOST STRINGENT REQUIREMENT OF THE LATEST EDITIONS OF THE FDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION AND OSCEOLA COUNTY ROAD CONSTRUCTION SPECIFICATIONS.
2. THERE SHALL BE NO ROAD CLOSURES WITHOUT PRIOR APPROVAL FROM THE OSCEOLA COUNTY BOARD OF COUNTY COMMISSIONERS. NO OPEN CUTS ALONG ROADWAY ARE ALLOWED UNLESS APPROVED BY COUNTY ENGINEER.
3. UPON APPROVAL OF YOUR PERMIT, THE PROPOSED TTC (TEMPORARY TRAFFIC CONTROL) PLAN IS ACCEPTABLE.
4. ALL UNDERGROUND UTILITIES UNDER THE ROADWAY AND WITHIN 12' OF THE ROADWAY SHALL BE INSTALLED A MINIMUM OF 42", OTHERWISE 30" IS REQUIRED. ALL DIRECTIONAL BORE CASINGS SHALL EXTEND A MINIMUM OF 6' BEYOND THE EDGE OF PAVEMENT.
5. WITHIN 48 HOURS OF BACKFILLING, ALL DISTURBED AREAS SHALL BE RE-GRADED AS NECESSARY TO ASSURE POSITIVE DRAINAGE. IN ADDITION SOD ALL DISTURBED AREAS (NO SEED OR MULCH) WITH SOD OF THE SAME TYPE.
6. ANY PERMITTED PROJECT LASTING OVER 30 DAYS WILL BE RESPONSIBLE TO MAINTAIN THE GRASS WITHIN THE PROJECT LIMITS. GRASS OVER 6" IN HEIGHT WILL BE MOWED.
7. ALL TRENCHES AND HOLES SHALL BE BACKFILLED PER OSCEOLA COUNTY STANDARDS AT THE END OF EVERY WORKDAY. THE ROADWAY/SIDEWALK SHALL BE KEPT CLEAR OF ANY DIRT OR DEBRIS AT ALL TIMES.
8. THE CONTRACTOR SHALL BE REQUIRED TO IMPLEMENT THE BEST MANAGEMENT PRACTICES (BMP'S) AS OUTLINED IN THE FLORIDA STORM WATER EROSION AND SEDIMENT CONTROL INSPECTOR'S MANUAL PUBLISHED BY FDEP ALONG WITH FOLLOWING THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) REGULATIONS AS SET FORTH IN CHAPTER 62.621 OF THE FLORIDA ADMINISTRATIVE CODE.
9. PER M.U.T.C.D., CHAPTER 6, THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN/DESIGN A SAFE BYPASS AT ALL TIMES WHEN THE EXISTING SIDEWALK/PATHWAY IS DISTURBED DURING CONSTRUCTION.
10. ANY DAMAGE TO THE SIDEWALK/ROADWAY/DRIVEWAY SHALL BE REPAIRED TO OSCEOLA COUNTY STANDARDS, AT THE APPLICANTS EXPENSE.
11. WHEN REPLACING SIDEWALKS AT INTERSECTIONS, A CAST IN PLACE DETECTABLE WARNING STRIP IS REQUIRED.
12. ALL PROPOSED PAVEMENT SHALL BE CONSTRUCTED IN COMPLIANCE WITH OSCEOLA COUNTY ROAD SPECIFICATIONS TO INCLUDE ROLLING/RIGID STRAIGHT EDGE TEST AND LEVELING AS NECESSARY.
13. PLACEMENT OF POLE/TERMINAL/HYDRANT/METER/VAULT MUST BE SET AS CLOSE TO RIGHT-OF-WAY LINE AS POSSIBLE. NO POLES/TERMINALS ARE ALLOWED IN THE DITCH BOTTOM OR THE FRONT SLOPE OF DITCH OR WITHIN 1 FOOT OF ANY EXISTING SIDEWALK. WHEN POSSIBLE, ALL UTILITIES SHALL BE PLACED WITHIN A DEDICATED UTILITY EASEMENT.
14. PRIOR TO FINAL ACCEPTANCE, AS-BUILT DRAWINGS ARE REQUIRED AT THE COMPLETION OF PROJECT. THE AS-BUILT SURVEY SHALL INCLUDE ALL NEWLY INSTALLED FACILITIES WITH HORIZONTAL AND VERTICAL LOCATIONS TAKEN AT A MINIMUM 100 FOOT INTERVALS AND AT ALL GRADE BREAKS OR BENDS, ALSO ANY VARIATIONS FROM REQUIRED MATERIAL SIZES OR TYPES SHALL ALSO BE NOTED (DIGITAL COPY OF AS-BUILT SURVEY IN PDF AND AUTOCAD FORMAT). AS-BUILT DRAWINGS SHALL BE SUBMITTED TO THE PUBLIC WORKS PERMITTING DEPARTMENT FOR FINAL ACCEPTANCE.
15. PERMIT IS VALID IN COUNTY RIGHT-OF-WAY ONLY, PLEASE OBTAIN THE NECESSARY PERMISSION/DOCUMENTS/PERMITS FOR WORK OUTSIDE COUNTY RIGHT-OF-WAY OR ENVIRONMENTAL AREAS WHICH INCLUDES: HOA'S, CDD'S, AND ALL PRIVATELY OWNED EASEMENTS.
16. ONLY UNDER EXTREME CIRCUMSTANCES WILL THE COUNTY ALLOW OPEN-CUTS WITHIN ROADWAYS THAT HAVE BEEN RESURFACED OR RECONSTRUCTED WITHIN THE LAST 5 YEARS. THE PERMITTEE WILL BE REQUIRED TO SHOW WRITTEN JUSTIFICATION THAT INCLUDES AN ENGINEERING ANALYSIS OF FACTORS DEMONSTRATING THAT THE MEANS, OTHER THAN THE OPEN-CUT, WILL NOT BE POSSIBLE.
17. ALL EXISTING FACILITIES THAT WILL BE UNOCCUPIED WITHIN THE RIGHT-OF-WAY SHALL BE REMOVED. THE FACILITY SHALL NOT BE ABANDONED AND LEFT IN PLACE.
18. ALL PIPE CULVERTS AND STORM SEWERS SHALL COMPLY WITH SECTION 430 OF THE LATEST EDITION OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
19. THE CONTRACTOR IS REQUIRED TO PROVIDE A WORKSITE TRAFFIC SUPERVISOR IN ACCORDANCE WITH SECTIONS 102 AND 105 OF THE LATEST EDITION OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
20. LOCATE FLAGS TO BE REMOVED WHEN THE JOB IS COMPLETED.
21. ANY SOFT DIG WITHIN 15 FEET OF THE EDGE OF PAVEMENT IS REQUIRED TO BE PROPERLY BACKFILLED WITH EXCAVATABLE FLOWABLE FILL. REFER TO THE ATTACHED TYPICAL TEST HOLE PROCEDURE SHEET.

GENERAL PROJECT DATA

PRIOR TO THE COMMENCEMENT OF ANY WORK, A PRECONSTRUCTION MEETING WITH THE CITY OF ST. CLOUD IS REQUIRED.

BOUNDARY AND TOPOGRAPHIC SURVEY FOR THIS PROJECT, DATED AUGUST 5, 2022, PROVIDED BY GEOPOINT SURVEYING, INC.

THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITIES AND TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATIONS TO THESE UTILITIES WITH THE OWNER OF THE UTILITY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING AN UNDERGROUND OR OVERHEAD UTILITY, WHETHER SHOWN ON THE PLAN OR LOCATED BY THE UTILITY COMPANY. ALL UTILITIES THAT INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE BE RELOCATED BY THE RESPECTIVE UTILITY COMPANY AND THE CONTRACTOR SHALL COOPERATE WITH THEM DURING RELOCATION OPERATIONS. ANY DELAY OR INCONVENIENCE CAUSED TO THE CONTRACTOR BY THE RELOCATION OF VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED.

THE UTILITIES ARE THE PROPERTY OF THE FOLLOWING:

WATER
TOHO WATER AUTHORITY
951 MLK JR. BOULEVARD
KISSIMMEE, FLORIDA 34741
(407) 944-5000

SEWER
TOHO WATER AUTHORITY
951 MLK JR. BOULEVARD
KISSIMMEE, FLORIDA 34741
(407) 944-5000

POWER
OUC ELECTRIC
5003 PERSHING AVENUE
ORLANDO, FLORIDA 32822
(407) 384-4100

GAS
FLORIDA PUBLIC UTILITIES
(800) 427-7712

PHONE/TV/INTERNET
SPECTRUM
1315 KENTUCKY AVENUE
ST. CLOUD, FLORIDA 34769
(407) 708-9264

PHONE/TV/INTERNET
AT&T
4305 13TH STREET
ST. CLOUD, FLORIDA 34769
(407) 957-5932

CITY OF ST. CLOUD STANDARDS AND SPECIFICATIONS

ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF ST. CLOUD LAND DEVELOPMENT CODE (LDC).

SHOP DRAWINGS

SHOP DRAWINGS AND CERTIFICATIONS FOR ALL STORM DRAINAGE, WATER SYSTEM, RECLAIMED WATER SYSTEM, SEWER SYSTEM, AND PAVING SYSTEM MATERIALS AND STRUCTURES ARE REQUIRED. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING THE MATERIALS REQUIRED FOR CONSTRUCTION.

AS-BUILTS

A COMPLETE AS-BUILT SURVEY SHALL BE PROVIDED TO THE ENGINEER BY THE SITE CONTRACTOR NO LESS THEN 2 WEEKS PRIOR TO FINAL INSPECTION. ALL AS-BUILT SURVEYS SHALL BE PREPARED BY A FLORIDA LICENSED LAND SURVEYOR. TWO (2) SIGNED, SEALED AND DATED HARD COPIES, ONE (1) ELECTRONIC COPY (DWG FORMAT) AND ONE (1) ELECTRONIC COPY (PDF FORMAT) SHALL BE PROVIDED TO THE ENGINEER. ADDITIONAL AS-BUILT REQUIREMENTS AS REQUIRED BY ST. CLOUD OR AS INCLUDED IN THE AFOREMENTIONED DOCUMENTS.

PERMITS AND PERMIT REQUIREMENTS

THE CONTRACTOR SHALL OBTAIN FROM THE OWNER COPIES OF ALL REGULATORY AND LOCAL AGENCY PERMITS. THE CONTRACTOR SHALL BE EXPECTED TO REVIEW AND ABIDE BY ALL THE REQUIREMENTS AND LIMITATIONS SET FORTH IN THE PERMITS. A COPY OF THE APPLICABLE PERMITS SHALL BE KEPT ON THE JOB AT ALL TIMES.

LAYOUT AND CONTROL

UNLESS OTHERWISE NOTED ON THE PLANS, THE CONTRACTOR SHALL PROVIDE FOR THE LAYOUT OF ALL THE WORK TO BE CONSTRUCTED. BENCHMARK INFORMATION SHALL BE PROVIDED TO THE CONTRACTOR BY THE OWNER OR OWNER'S SURVEYOR. ANY DISCREPANCIES BETWEEN FIELD MEASUREMENTS AND CONSTRUCTION PLAN INFORMATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.

DRAINAGE SYSTEMS

THE CONTRACTOR SHALL PERFORM ALL WORK PERTAINING TO DRAINAGE INCLUDING EXCAVATION OF W.R.A. PRIOR TO THE COMMENCEMENT OF OTHER WORK INCLUDED IN THESE PLANS. THE DRAINAGE FACILITIES SHALL BE MAINTAINED BY THE CONTRACTOR DURING THE COURSE OF THIS CONTRACT. THE CONTRACTOR SHALL INCLUDE FUNDS IN THE DRAINAGE COSTS OF THE CONTRACT TO OPERATE AND MAINTAIN THE DRAINAGE SYSTEMS DURING THE WORK PROCESS.

QUALITY CONTROL TESTING REQUIREMENTS

ALL TESTING RESULTS SHALL BE PROVIDED TO THE ENGINEER. ALL TESTING REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF ST. CLOUD. TEST RESULTS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
-SOIL DENSITY TESTS
-CONCRETE COMPRESSIVE STRENGTH TESTS
-LAMPING AND TV INSPECTIONS
-INFILTRATION/EXFILTRATION TESTS; AIR TESTS
-PRESSURE TESTS
-BACTERIOLOGICAL TESTS
-FIRE FLOW TESTS
-LIFT STATION START-UP REPORT
-OTHERS AS MAY BE REQUIRED BY PERMIT OR THE ENGINEER

EARTHWORK QUANTITIES

THE CONTRACTOR SHALL PERFORM HIS OR HER OWN INVESTIGATIONS AND CALCULATIONS AS NECESSARY TO ASSURE THEMSELVES OF EARTHWORK QUANTITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY IMPORT FILL NEEDED, OR FOR REMOVAL AND DISPOSAL OF EXCESS MATERIALS. ALL EARTHWORK SHALL BALANCE ON-SITE, AND, IF NOT BALANCED, A SUMMARY OF QUANTITIES BEING ADDED OR REMOVED FROM THE SITE SHALL BE PROVIDED WITH THE CONSTRUCTION PLANS.

EROSION CONTROL

EROSION AND SILTATION CONTROL MEASURES ARE TO BE PROVIDED AND INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION. THESE MEASURES ARE TO BE INSPECTED BY THE CONTRACTOR ON A REGULAR BASIS AND ARE TO BE MAINTAINED OR REPAIRED ON AN IMMEDIATE BASIS AS REQUIRED. REFER TO WATER MANAGEMENT DISTRICT PERMIT FOR ADDITIONAL REQUIREMENTS FOR EROSION CONTROL AND SURFACE DRAINAGE. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE STABILIZED WITHIN 7 DAYS OF COMPLETION OF CONSTRUCTION. OTHER MATERIALS SHALL BE REVIEW AND APPROVED BY THE CITY.

LIMITS OF DISTURBANCE

AT NO TIME SHALL THE CONTRACTOR DISTURB SURROUNDING PROPERTIES OR TRAVEL ON SURROUNDING PROPERTIES WITHOUT WRITTEN CONSENT FROM THE PROPERTY OWNER. REPAIR OR RECONSTRUCTION OF DAMAGED AREAS ON SURROUNDING PROPERTIES SHALL BE PERFORMED BY THE CONTRACTOR ON AN IMMEDIATE BASIS. ALL COSTS FOR REPAIRS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO EXTRA COMPENSATION SHALL BE PROVIDED. GRADING AND/OR CLEARING ON PROPERTIES OTHER THAN SHOWN ON THE APPROVED PLANS IS PROHIBITED.

TREE REMOVAL

THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ENGINEER WHEN ALL WORK IS LAID OUT (SURVEY STAKED), SO THAT A DETERMINATION MAY BE MADE OF SPECIFIC TREES TO BE REMOVED. NO TREES ON THE CONSTRUCTION PLANS AS BEING SAVED SHALL BE REMOVED WITHOUT PERMISSION FROM THE OWNER, ENGINEER AND THE CITY OF ST. CLOUD.

CLEARING AND GRUBBING

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING AND GRUBBING FOR SITE CONSTRUCTION INCLUDING CLEARING FOR PAVING, UTILITIES, DRAINAGE FACILITIES AND BUILDING CONSTRUCTION. ALL AREAS TO BE CLEARED SHALL BE FIELD STAKED AND REVIEWED BY THE OWNER AND ENGINEER PRIOR TO ANY CONSTRUCTION.

MATERIAL STORAGE/DEBRIS REMOVAL

1) NO COMBUSTIBLE BUILDING MATERIALS MAY BE ACCUMULATED ON THE SITE AND NO CONSTRUCTION WORK INVOLVING COMBUSTIBLE MATERIALS MAY BEGIN UNTIL INSTALLATION OF ALL REQUIRED WATER MAINS AND FIRE HYDRANTS HAVE BEEN COMPLETED, DEP APPROVAL RECEIVED FOR THE WATER MAINS, AND THE HYDRANTS ARE IN OPERATION. CONSTRUCTION WORK INVOLVING NON-COMBUSTIBLE MATERIALS, SUCH AS CONCRETE, MASONRY AND STEEL MAY BEGIN PRIOR TO THE FIRE HYDRANTS BEING OPERATIONAL.

2) ALL MATERIALS EXCAVATED SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE STOCKPILED AT ON-SITE LOCATIONS AS SPECIFIED BY THE OWNER. MATERIALS SHALL BE STOCKPILED SEPARATELY AS TO USABLE (NONORGANIC) FILL STOCKPILES AND ORGANIC (MUCK) STOCKPILES IF MUCK IS ENCOUNTERED. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL UNSUITABLE FILL MATERIALS FROM THE SITE. ALL CLAY ENCOUNTERED SHALL BE EXCAVATED OUT AND REPLACED WITH CLEAN GRANULAR FILL MATERIALS.

FILL MATERIAL

ALL MATERIALS SHALL CONTAIN NO MUCK, STUMPS, ROOTS, BRUSH, VEGATATIVE MATTER, RUBBISH OR OTHER MATERIAL THAT WILL NOT COMPACT INTO A SUITABLE AND ENDURING BACKFILL. FILL SHALL BE CLEAN, NON-ORGANIC, GRANULAR MATERIAL WITH NOT MORE THAN 10% PASSING THE NO. 200 SIEVE.

COMPACTION

FILL MATERIALS PLACED UNDER ROADWAYS SHALL BE COMPACTED TO AT LEAST 98% OF THE MAXIMUM DENSITY AS SPECIFIED IN AASHTO T-180. ALL OTHER FILL AREAS ARE TO BE COMPACTED TO AT LEAST 95% MAXIMUM DENSITY AS SPECIFIED IN AASHTO T-180. FILL MATERIALS SHALL BE PLACED AND COMPACTED IN A MAXIMUM OF 12" LIFTS. THE CONTRACTOR SHALL PROVIDE THE ENGINEER AND OWNER WITH ALL (PASSING AND FAILING) TESTING RESULTS. RESULTS SHALL BE PROVIDED ON A TIMELY AND REGULAR BASIS PRIOR TO CONTRACTOR'S PAY REQUEST SUBMITTAL FOR THE AFFECTED WORK.

PAVEMENT AND/OR ROAD AND RIGHT-OF-WAY WORK

ALL PRESSURE PIPE UNDER ROADWAY SHALL BE DIP EXTENDING 5' FROM EDGE OF PAVEMENT, UNLESS OTHERWISE APPROVED BY THE CITY OF ST. CLOUD AND/OR OSCEOLA COUNTY (AS APPLICABLE).

OWNER/OPERATOR

THE CITY OF ST. CLOUD SHALL OPERATE AND MAINTAIN THE ROADWAYS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE EXPECTED TO MEET ALL CITY REQUIREMENTS.

GENERAL DESIGN INTENT

ALL PAVING SURFACES IN INTERSECTIONS AND ADJACENT SECTIONS SHALL BE GRADED TO DRAIN POSITIVELY IN THE DIRECTION SHOWN BY THE FLOW ARROWS ON THE PLANS AND TO PROVIDE A SMOOTHLY TRANSITIONED DRIVING SURFACE FOR VEHICLES WITH NO SHARP BREAKS INGRADE, AND NO UNUSUALLY STEEP OR REVERSE CROSS SLOPES. APPROACHES TO INTERSECTIONS AND ENTRANCE AND EXIT GRADES TO INTERSECTIONS WILL HAVE TO BE STAKED IN THE FIELD AT DIFFERENT GRADES THAN THE CENTERLINE GRADES TO ACCOMPLISH THE PURPOSES OUTLINED. IN ADDITION, THE STANDARD CROWN WILL HAVE TO BE CHANGED IN ORDER TO DRAIN POSITIVELY IN THE AREA OF INTERSECTIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH THE ABOVE AND THE ENGINEER SHALL BE CONSULTED SO THAT HE MAY MAKE ANY AND ALL REQUIRED INTERPRETATIONS OF THE PLANS OR GIVE SUPPLEMENTARY INSTRUCTION TO ACCOMPLISH THE INTENT OF THE PLANS.

MATERIALS/CONSTRUCTION SPECIFICATIONS

MATERIALS AND CONSTRUCTION METHODS FOR THE ROADWAY CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

PAVEMENT SECTION REQUIREMENTS

CONSTRUCTION OF ROADWAYS WITHIN PROJECT SHALL BE: (A) 10" OF GRUBBED AND STABILIZED BASE COURSE @ 98% OF MAX. DENSITY STABILIZATION, LBR 40 OR FBV 50 PSI THICKNESS, EXTENDED 12" BEYOND PAVEMENT. (B) 6" OF LIMEROCK BASE COURSE @ 98% OF MAX. DENSITY OF AASHTO T-180, LBR 100. (C) 1.5" OF TYPE S-9.5 ASPHALTIC CONCRETE SURFACE COURSE @ 96% OF MAX. LAB DENSITY.

SUBGRADE PREPARATION AND PAVEMENT INSTALLATION SHALL CONFORM TO THE LATEST FDOT STANDARDS AND SOILS REPORT RECOMMENDATIONS.

SIDEWALKS

SIDEWALKS ARE TO BE CONSTRUCTED IN THE AREA AS SHOWN ON THE CONSTRUCTION PLANS. ALL SIDEWALKS NOT ADJACENT TO RESIDENTIAL LOTS SHALL BE CONSTRUCTED WITH THE SITE INFRASTRUCTURE. A SIDEWALK BOND WILL BE REQUIRED AT THE TIME OF FINAL PLAN AND/OR ROAD INFRASTRUCTURE COMPLETION. THE 5' SIDEWALK SHALL BE CONSTRUCTED OF 4 INCHES OF CONCRETE WITH A 28 DAY COMPRESSION STRENGTH OF 3,000 PSI AND FIBER REINFORCEMENT. JOINTS SHALL BE EITHER TOOLED OR SAWCUT AT A DISTANCE OF 5' LENGTHS, HANDICAP RAMPS SHALL BE PROVIDED AT ALL INTERSECTIONS AND BE IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS FOR HANDICAP ACCESSIBILITY.

PAVEMENT MARKINGS/SIGNAGE

PAVEMENT MARKINGS AND SIGNAGE SHALL BE PROVIDED AS SHOWN ON THE CONSTRUCTION PLANS AND SHALL MEET THE REQUIREMENTS OF THE OWNER/OPERATOR. SIGNAGE SHALL BE IN CONFORMANCE WITH MUTCD (LATEST EDITION). A 48-HOUR PAVEMENT CURING TIME WILL BE PROVIDED PRIOR TO APPLICATION OF THE PAVEMENT MARKINGS. REFLECTIVE PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH FDOT STANDARD PLANS INDEX 711-001, LATEST EDITION.

BUILDING MARKINGS

ADDRESS NUMERALS SHALL NOT BE LESS THAN 3 INCHES IN HEIGHT FOR RESIDENTIAL BUILDINGS, STRUCTURES, OR PORTIONS THEREOF, AND AT LEAST SIX INCHES IN HEIGHT FOR ALL OTHER BUILDINGS, STRUCTURES, OR PORTIONS THEREOF. ADDRESS NUMERALS SHALL BE ARABIC NUMERALS OR ALPHABET LETTERS, NO CURSIVE LETTERS.

TRAFFIC CONTROL

A MINIMUM OF 2-WAY, ONE LANE TRAFFIC SHALL BE MAINTAINED IN THE WORK SITE AREA. ALL CONSTRUCTION WARNING SIGNAGE SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. ACCESS SHALL BE CONTINUOUSLY MAINTAINED FOR ALL PROPERTY OWNERS SURROUNDING THE WORK SITE AREA. LIGHTED WARNING DEVICES ARE TO BE OPERATIONAL PRIOR TO DUSK EACH NIGHT DURING CONSTRUCTION.

CURBING

CURBING SHALL BE CONSTRUCTED WHERE NOTED ON THE CONSTRUCTION PLANS. CONCRETE FOR CURBS SHALL BE DEPARTMENT OF TRANSPORTATION CLASS "1" CONCRETE WITH A 28 DAY COMPRESSION STRENGTH OF 3,000 PSI. ALL CURBS SHALL HAVE SAW CUT CONTRACTION JOINTS AND SHALL BE CONSTRUCTED AT INTERVALS NOT TO EXCEED 10'-0" ON CENTER. CONSTRUCTION OF CURBS SHALL BE IN CONFORMANCE WITH THE LATEST EDITION OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. DETAILS PROVIDED ON THE CONSTRUCTION PLANS.

R/W RESTORATION

ALL AREAS WITHIN THE RIGHT-OF-WAYS SHALL BE FINISH GRADED WITH A SMOOTH TRANSITION INTO EXISTING GROUND. ALL SWALES SHALL BE STABILIZED IMMEDIATELY AFTER FINAL GRADING. ALL DISTURBED AREAS SHALL BE RAKED CLEAN OF ALL LIMEROCK AND ROCKS AND SODDED AFTER FINAL GRADING IN ACCORDANCE WITH THE CONSTRUCTION PLANS PRIOR TO FINAL INSPECTION. ALL GRASSING (SEED OR SOD) SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL FINAL ACCEPTANCE BY THE OWNER/OPERATOR.

SITE ACCESS

ALL ACCESS TO THE JOB SITE FOR CONSTRUCTION AND RELATED ACTIVITIES SHALL BE BY EXISTING STREETS AND ROADS,.

GENERAL NOTES:

1. ALL PROPERTY AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN WHAT EXISTED PRIOR TO CONSTRUCTION. THE COST FOR SUCH RESTORATION SHALL BE INCIDENTAL TO OTHER CONSTRUCTION AND NO EXTRA COMPENSATION WILL BE ALLOWED.
2. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL INSTALL EROSION CONTROL DEVICES AT ALL DOWN STREAM INLETS AND SWALES, IN ADDITION TO THE EROSION CONTROL MEASURES SHOWN ON THE EROSION CONTROL PLANS.
3. ALL FILL AREAS TO BE SCARIFIED A MINIMUM DEPTH OF SIX INCHES AND ALL ORGANICS, TRASH AND DEBRIS TO BE REMOVED PRIOR TO THE PLACEMENT OF THE FILL MATERIAL. ALL FILL TO BE PLACED IN 12" MAXIMUM LIFTS AND COMPACTED TO 98% MAX. DENSITY BY A MODIFIED PROCTOR.
4. ALL EARTHWORK OPERATIONS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS, PLANS AND RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER (AS APPLICABLE).
5. ALL COMPACTED BUILDING PAD AREAS TO BE GRADED FLAT AND COMPACTED TO AN ELEVATION THAT IS EIGHT (8) INCHES BELOW THE FINISHED FLOOR. ELEVATIONS SPECIFIED ON THE GRADING PLANS.
6. ALL DRAINAGE FLOW ARROWS SHALL BE RESPECTED SUCH THAT THE FINISHED GRADING RESULTS IN POSITIVE DRAINAGE IN THE DIRECTION INDICATED HEREON UNLESS APPROVED IN WRITING BY THE PROJECT ENGINEER AS AN ACCEPTABLE DEVIATION FROM THIS REQUIREMENT.
7. SOD ENTIRE RIGHT-OF-WAY BETWEEN BACK OF CURB AND SIDEWALK.
8. SOD ALL DISTURBED AREAS WITH SLOPES 5% OR GREATER.
9. SEED & MULCH ALL DISTURBED AREAS UNLESS SPECIFIED TO BE SODDED.
10. WHEN TRENCH EXCAVATION EXCEEDS (5) FIVE IN DEPTH:
    A. CONTRACTOR SHALL CONFORM TO OSHA STD. 29CFR. SECTION 1926.650 WHICH IS INCORPORATED IN FL. STATE 90-96.
    B. THE CONTRACTOR SHALL PROVIDE WRITTEN ASSURANCE OF COMPLIANCE WITH THIS LAW
    C. TRENCH SAFETY SYSTEM SHALL BE DESIGNED BY THE CONTRACTOR.
11. BASE SHALL BE REQUIRED FOR PIPES WITH LESS THAN 20" COVER.
12. ALL DRAINAGE PIPES ARE REINFORCED CONCRETE PIPE, CLASS III, UNLESS OTHERWISE NOTED.
13. DRAINAGE STRUCTURE "RIM" ELEVATION REFERS TO TOP OF FINISHED STRUCTURE.
14. THE CONTRACTOR SHALL ENSURE THAT ALL PERMITS FOR CONSTRUCTION ARE OBTAINED PRIOR TO STARTING WORK. ALL PERMITS SHALL BE PROVIDED TO THE CITY OF ST. CLOUD PRIOR TO STARTING WORK.
15. ALL CONSTRUCTION SHALL CONFORM TO CITY OF ST. CLOUD STANDARDS AND SHALL BE SUBJECT TO FINAL APPROVALS FROM THE CITY PRIOR TO FINAL PAYMENT.
16. THE STORMWATER MANAGEMENT SYSTEM WILL BE OPERATED AND MAINTAINED BY THE OLD HICKORY TREE ESTATES HOMEOWNERS ASSOCIATION.
17. BUILDING HEIGHT SHALL NOT EXCEED 35 FEET.
18. ALL SIDEWALKS NOT ALONG THE ALLEY FRONTED LOTS OR THE RESIDENTIAL LOTS ALONG THE LOCAL STREETS SHALL BE CONSTRUCTED WITH THE SITE INFRASTRUCTURE. A SIDEWALK BOND WILL BE REQUIRED AT TIME OF FINAL PLAT AND / OR ROAD INFRASTRUCTURE COMPLETION.

LEGEND

- PROPERTY BOUNDARY LINE
- RIGHT-OF-WAY LINE
- ROADWAY CENTER LINE
- WJL — JURISDICTIONAL WETLAND LINE
- APPROX. EDGE OF WATER LINE
- LANDSCAPE BUFFER LINE
- EASEMENT LINE
- OU — EXISTING OVERHEAD POWER LINE
- SF — SILT FENCE LINE
- SOIL DIVIDE LINE
- EXISTING FENCE LINE
- #" X-WM- EXISTING POTABLE WATER MAIN
- #" WM PROPOSED POTABLE WATER MAIN
- #" X-RM- EXISTING POTABLE WATER MAIN
- #" RM PROPOSED POTABLE WATER MAIN
- EXISTING SANITARY FORCE MAIN
- PROPOSED SANITARY FORCE MAIN
- EXISTING SANITARY SEWER MAIN
- PROPOSED SANITARY SEWER MAIN
- EXISTING STORM DRAINAGE PIPE
- PROPOSED STORM DRAINAGE PIPE
- PRE-DEVELOPMENT DRAINAGE DIVIDE
- POST-DEVELOPMENT DRAINAGE DIVIDE
- SLOPE GRADE BREAK LINE
- 150 — EXISTING GRADE 5' CONTOUR
- EXISTING GRADE 1' CONTOUR
- 150 — PROPOSED GRADE 5' CONTOUR
- PROPOSED GRADE 1' CONTOUR

SYMBOLS

- DITCH BOTTOM INLET
- STORM DRAINAGE MANHOLE
- TYPE 5 CURB INLET
- TYPE 6 CURB INLET
- POTABLE WATER SINGLE SERVICE
- SEWER SINGLE SERVICE
- SANITARY SEWER MANHOLE
- SANITARY LIFT STATION WET WELL
- AIR RELEASE VALVE
- ROADSIDE TRAFFIC SIGN
- MITERED END-SECTION
- ENERGY DISSIPATOR
- U-WALL WITH BAFFLE
- DRAINAGE FLOW ARROW
- POTABLE WATER DOUBLE SERVICE
- SEWER DOUBLE SERVICE
- GATE VALVE
- FIRE HYDRANT
- SOIL BORING LOCATION SW-01

ABBREVIATIONS

99.9FG	PROPOSED FINISHED GRADE ELEVATION
99.9meg	MATCH EXISTING GRADE ELEVATION
99.9TW	PROPOSED TOP OF WALL ELEVATION
99.9+	EXISTING GRADE ELEVATION
FF ELEV. 99.9	PROPOSED FINISHED FLOOR ELEVATION
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
PVI	POINT OF VERTICAL INTERSECTION
BVCS	BEGIN VERTICAL CURVE STATION
EVCS	END VERTICAL CURVE STATION
BVCE	BEGIN VERTICAL CURVE ELEVATION
EVCE	END VERTICAL CURVE ELEVATION
K	VERTICAL CURVE COEFFICIENT
ELEV	ELEVATION
WRA	WATER RETENTION AREA
INT	INTERSECTION
MES	MITERED END SECTION
DBI	DITCH BOTTOM INLET
ROW	RIGHT-OF-WAY
BSL	BUILDING SETBACK LINE
LSB	LANDSCAPE BUFFER
UE	UTILITY EASEMENT
DE	DRAINAGE EASEMENT

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Thomas L. Knight, PE, on October 15, 2025.

Signature must be verified on any electronic copies.

DATE	REVISION
Oct. 2025	Revised per St. Cloud comments dated Sep 5, 2025

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

GENERAL NOTES

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
October 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
NONE

SHEET NUMBER
02

EROSION CONTROL PLAN

AN EROSION CONTROL PLAN SHALL BE IMPLEMENTED BY THE CONTRACTOR AND THE CONTRACTOR SHALL EXECUTE ALL MEASURES NECESSARY TO LIMIT THE TRANSPORT OF SEDIMENTS OUTSIDE THE LIMITS OF THE PROJECT TO THE QUANTITIES AND CONDITIONS THAT EXIST PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THIS CONDITION WILL BE SATISFIED FOR THE TOTAL ANTICIPATED CONSTRUCTION PERIOD. PROVISIONS SHALL BE MADE TO PRESERVE THE INTEGRITY AND CAPACITY OF STORMWATER INLETS, SEDIMENT BASINS, SLOPE DRAINS, GRADING PATTERNS, ETC. REQUIRED TO MEET THIS PROVISION THROUGHOUT THE LIFE OF THE CONSTRUCTION OF THE PROJECT. CONTRACTOR SHALL PROVIDE HAY BAILS, SILT BARRIERS, TEMPORARY GRASSING, ETC. AS REQUIRED TO FULLY COMPLY WITH THE INTENT OF THIS SPECIFICATION. UPON COMPLETION OF CONSTRUCTION AND COMPLETED STABILIZATION OF POTENTIAL EROSION AREAS, THE CONTRACTOR SHALL REMOVE SEDIMENTATION CONTROL MEASURES AND CLEAN AND REPAIR ANY AREAS AFFECTED BY THE CONSTRUCTION ACTIVITIES.

STOCKPILING MATERIAL

NO EXCAVATED MATERIAL SHALL BE STOCKPILED SO AS TO DIRECT STORMWATER OFF THE PROJECT SITE OR INTO ANY ADJACENT WATER BODY OR STORMWATER COLLECTION SYSTEM. EXCAVATED MATERIAL SHALL NOT BE STOCKPILED SO AS TO WASHOUT AND CAUSE SEDIMENTATION OF ANY DOWN-STREAM DRAINAGE STRUCTURES OR WATER BODIES.

MAINTENANCE

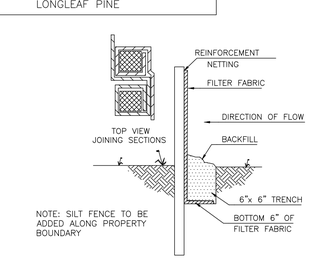
ALL FEATURES OF THE PROJECT SHALL BE CONSTRUCTED TO PREVENT EROSION AND SEDIMENTATION AND SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION PROPERLY WITHOUT THE TRANSPORT OF SEDIMENTS OUTSIDE THE LIMITS OF THE PROJECT. ANY SEDIMENT ACCUMULATIONS IN THE DRAINAGE SYSTEM SHALL BE REMOVED AND THE SYSTEM RESTORED TO ORIGINAL SPECIFICATIONS PRIOR TO THE COMPLETION AND FINAL APPROVAL OF THE PROJECT. UPON FINAL APPROVAL AND COMPLETION OF CONSTRUCTION, MAINTENANCE RESPONSIBILITIES MAY BE TRANSFERRED TO AN APPROVED ENTITY.

SOILS LEGEND

ID	DESCRIPTION	HSG
6	BASINGER FINE SAND, DEPRESSIONAL, 0-1% SLOPES	D
24	NARCOOSSEE FINE SAND, 0-2% SLOPES	A
42	SMYRNA FINE SAND, 0-2% SLOPES	D

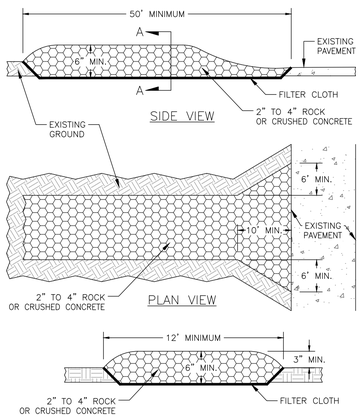
TREES LEGEND

ID	DESCRIPTION
CO	COCONUT PALM
LA	LAUREL OAK (DIAMOND OAK)
SL	SLASH PINE
LI	LIVE OAK
MAPLE	FLORIDA MAPLE
P	LONGLEAF PINE



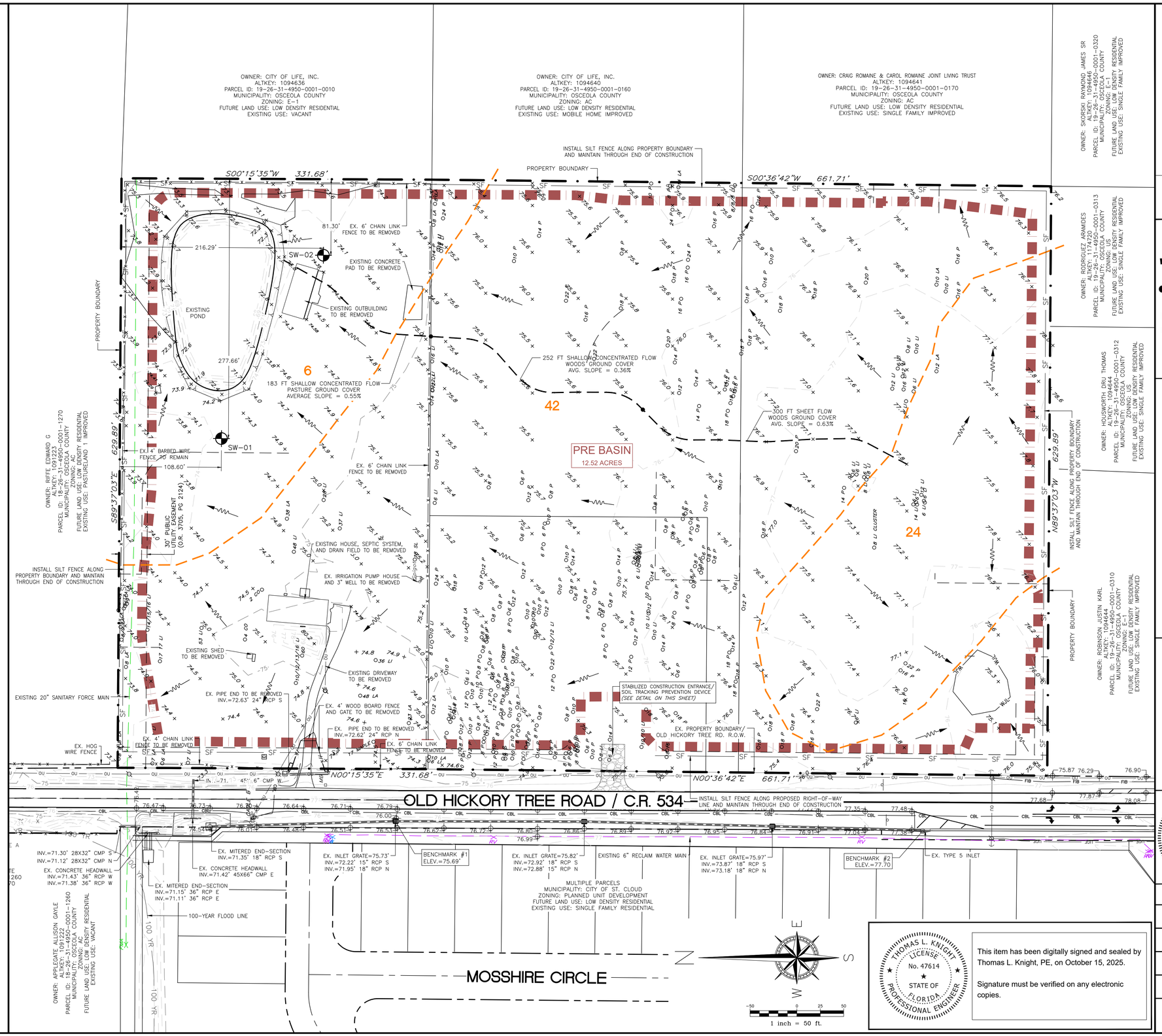
SILT FENCE DETAIL

N.T.S



SOIL TRACKING PREVENTION DEVICE

NOT TO SCALE



REVISION	DATE
Revised per St. Cloud comments dated Sep. 5, 2025	Oct. 2025

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OLD HICKORY TREE ESTATES

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OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
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PRE-DEVELOPMENT EROSION AND DUST ABATEMENT PLAN

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
October 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
1" = 50'

SHEET NUMBER
03

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AERIAL OVERLAY PLAN

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
October 2025

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PROJECT NUMBER
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SCALE
1" = 50'

SHEET NUMBER
04

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CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	94.248	60.000	090°00'00"
C2	32.201	20.500	090°00'00"
C3	39.270	25.000	090°00'00"
C4	39.270	25.000	090°00'00"
C5	15.708	10.000	090°00'00"
C6	3.001	85.000	002°01'21"
C7	47.896	85.000	032°17'07"
C8	61.401	85.000	041°23'19"
C9	21.220	85.000	014°18'13"
C10	48.695	31.000	090°00'00"
C11	39.270	25.000	090°00'00"

LINE TABLE		
LINE	LENGTH	DIRECTION
L1	194.118	S89° 23' 18.47"E
L2	153.500	S89° 23' 18.47"E
L3	99.500	S89° 23' 18.47"E
L4	93.500	S00° 36' 41.53"W
L5	153.500	S00° 36' 41.53"W
L6	44.367	S00° 36' 41.53"W
L7	485.500	S00° 36' 41.53"W
L8	153.500	S00° 36' 41.53"W
L9	153.500	S00° 36' 41.53"W
L10	156.523	S00° 36' 41.53"W
L11	154.881	N89° 23' 18.47"W
L12	313.000	N89° 23' 18.47"W
L13	465.000	N00° 36' 41.53"E
L14	133.000	N89° 23' 18.47"W
L15	313.000	S89° 23' 18.47"E

SITE DATA:

ALTERNATE KEYS 1094637
1094639
1094638
1094642
PARCEL IDS 19-26-31-4950-0001-0020
19-26-31-4950-0001-0155
19-26-31-4950-0001-0150
19-26-31-4950-0001-0180
MUNICIPALITY ..... CITY OF ST. CLOUD
EXISTING USE ..... SINGLE FAMILY/VACANT RESIDENTIAL
ZONING ..... PLANNED UNIT DEVELOPMENT (PUD)
FUTURE LAND USE ..... LOW DENSITY RESIDENTIAL (LDR)
GROSS PROPERTY AREA ..... 625,717.87 SQ. FT.; 14.36 ACRES
R.O.W. DEDICATED TO OLD HICKORY TREE RD. ..... 0.27 ACRES
PROJECT AREA ..... 613,798.58 SQ. FT.; 14.09 ACRES
TOTAL NUMBER OF UNITS 54
MAXIMUM GROSS DENSITY ..... 3.83 D.U./AC.
PROPOSED GROSS DENSITY ..... 3.76 D.U./AC.
REQUIRED OPEN SPACE ..... 20.00% (122,839 SF/2.82 ACRES)
PROVIDED OPEN SPACE ..... 30.06% (188,070 SF/4.32 ACRES)
MAXIMUM BUILDING HEIGHT ..... 35 FEET (2 STORIES)
MAXIMUM LOT COVERAGE 65.00%
TOTAL NUMBER OF PHASES 1

LANDSCAPE BUFFERS:
NORTH ..... 15 FEET
SOUTH ..... 15 FEET
EAST ..... 15 FEET
WEST ..... 15 FEET

AREAS TABLE:

ID	LAND USE (TYPE)	AREA (AC.)	AREA (SQ. FT.)	% OF SITE	OWNED/MAINT. BY
LOTS	RESIDENTIAL AREA	6.55	285,614.60	45.61%	PRIVATE
R.O.W.	PUBLIC RIGHT-OF-WAY	3.41	148,433.13	23.75%	PUBLIC**
TRACT A	OPEN SPACE (BUFFER)	0.31	13,575.01	2.16%	H.O.A.
TRACT B	OPEN SPACE (BUFFER)	0.31	13,618.30	2.16%	H.O.A.
TRACT C	OPEN SPACE (STORMWATER, REC.)	3.05	132,715.39	21.24%	H.O.A.
TRACT D	OPEN SPACE (AMENITY AREA)	0.32	13,750.00	2.23%	H.O.A.
TRACT E	OPEN SPACE (BUFFER)	0.33	14,411.44	2.30%	H.O.A.
TRACT F	PUBLIC UTILITY (LIFT STATION)	0.08	3,600.00	0.56%	TOHO W.A.
TOTAL		14.36	625,717.87		

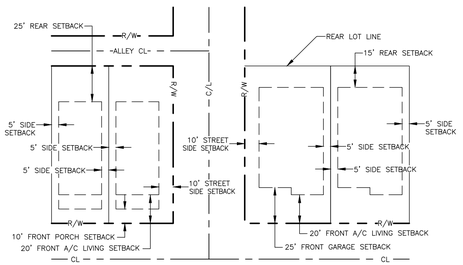
**NOTES:
1. STREETS A, B, & C ARE CLASSIFIED AS LOCAL STREETS AND SHALL BE OWNED AND MAINTAINED BY THE CITY OF ST. CLOUD
2. STREETS D & E ARE CLASSIFIED AS ALLEYS AND SHALL BE OWNED AND MAINTAINED BY THE CITY OF ST. CLOUD
3. OLD HICKORY TREE ROAD IS CLASSIFIED AS A LOCAL STREET AND IS OWNED AND MAINTAINED BY OSCEOLA COUNTY.

OPEN SPACE TABLE:

ID	TYPE	USES	ALLOW. AREA SQ.FT.	(AC.)	% OF REQ'D O.S.	TOTAL AREA SQ.FT.	(AC)	% OF TOTAL O.S.
TRACT A	BUFFER	LANDSCAPE	13,575	(0.31)	10.85%	13,575	(0.31)	7.22%
TRACT B	BUFFER	LANDSCAPE	13,618	(0.31)	10.88%	13,618	(0.31)	7.24%
TRACT C	BUFFER/AMENITY	LANDSCAPE/REC TRAIL	41,009	(0.94)	32.77%	41,009	(0.94)	21.81%
TRACT C	STORMWATER	WDA, REC TRAIL	28,781	(0.66)	22.99%	91,707	(2.10)	48.76%
TRACT D	AMENITY AREA	ACTIVE RECREATION	13,750	(0.32)	10.99%	13,750	(0.32)	7.31%
TRACT E	BUFFER	LANDSCAPE	14,411	(0.33)	11.52%	14,411	(0.33)	7.66%
		TOTALS	125,144	(2.87)	100.00%	188,070	(4.32)	100.00%

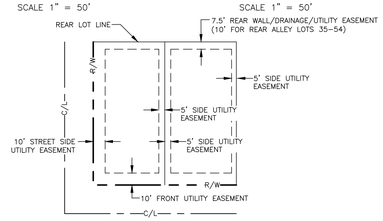
PARKING REQUIREMENTS (PER LDC SECTION 4.2.1)

RESIDENTIAL OFF-STREET:	4 SPACES PER UNIT	x 54 LOTS	=216
RESIDENTIAL ON-STREET:	1 SPACE PER 2 DWELLING UNITS	x 54 LOTS	= 27
RECREATION (OUTDOOR) ON-STREET:	1 SPACE PER 1,000 SQ. FT. / 13,750 SQ. FT.		= 14
	TOTAL SPACES REQUIRED (OFF-STREET)		=216
	(ON-STREET)		= 41
			257
TOTAL PARKING SPACES PROVIDED	(OFF-STREET)		=216
TOTAL PARKING SPACES PROVIDED	(ON-STREET)		= 43
			=259

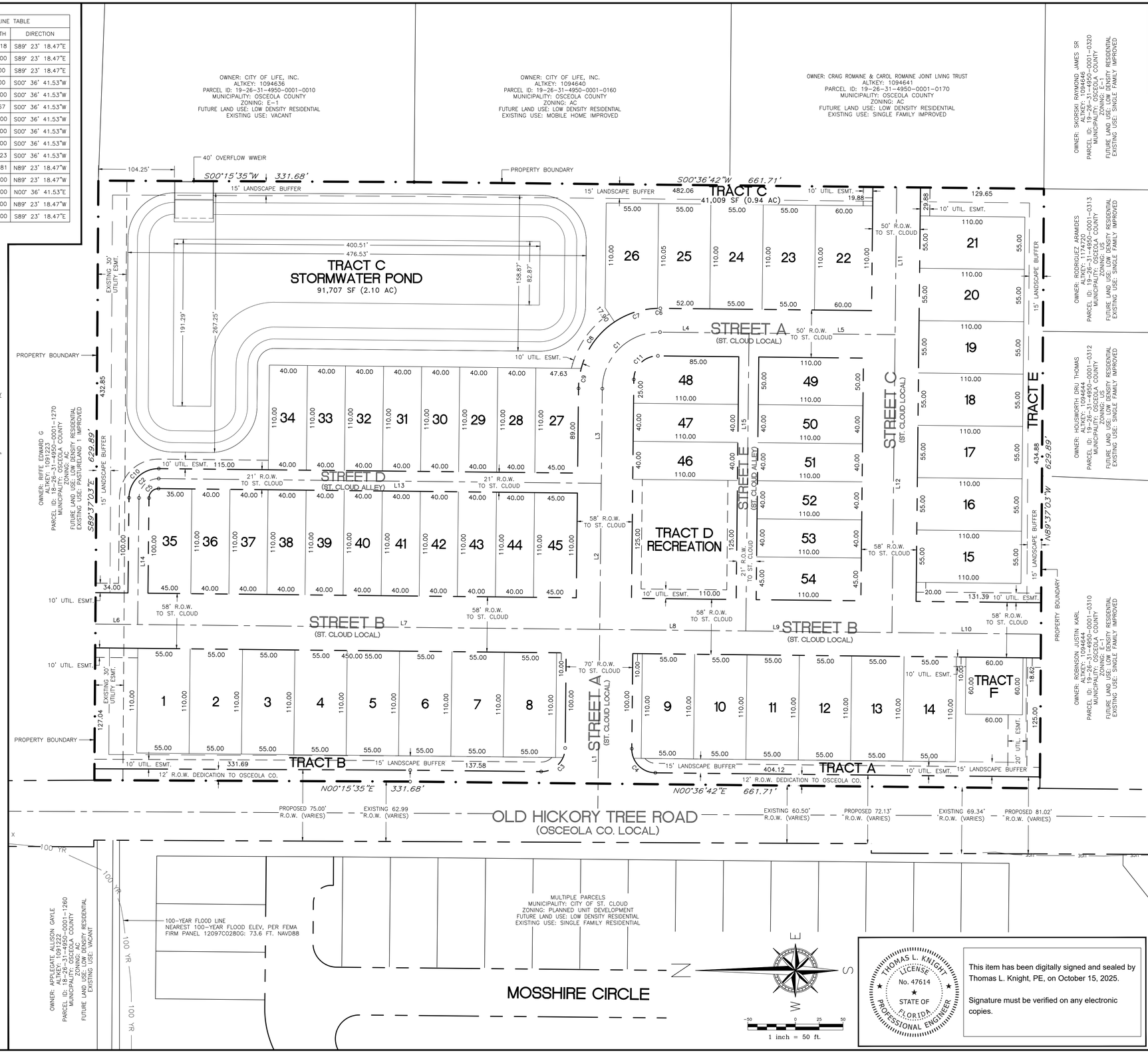


TYPICAL 40' LOT DWELLING SETBACKS
SCALE 1" = 50'

TYPICAL 55' LOT DWELLING SETBACKS
SCALE 1" = 50'



TYPICAL LOT EASEMENTS
NOT TO SCALE



REVISION	DATE
Revised Lot Dwelling Setback Details	Aug. 2025
Revised per St. Cloud comments dated 9-5-25	Oct. 2025

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

GEOMETRY PLAN

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
October 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
1" = 50'

SHEET NUMBER
05

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

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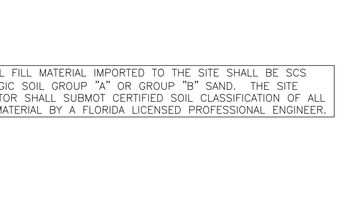
Signature must be verified on any electronic copies.

NOTE: ALL FILL MATERIAL IMPORTED TO THE SITE SHALL BE SCS HYDROLOGIC SOIL GROUP "A" OR GROUP "B" SAND. THE SITE CONTRACTOR SHALL SUBMOT CERTIFIED SOIL CLASSIFICATION OF ALL IMPORT MATERIAL BY A FLORIDA LICENSED PROFESSIONAL ENGINEER.

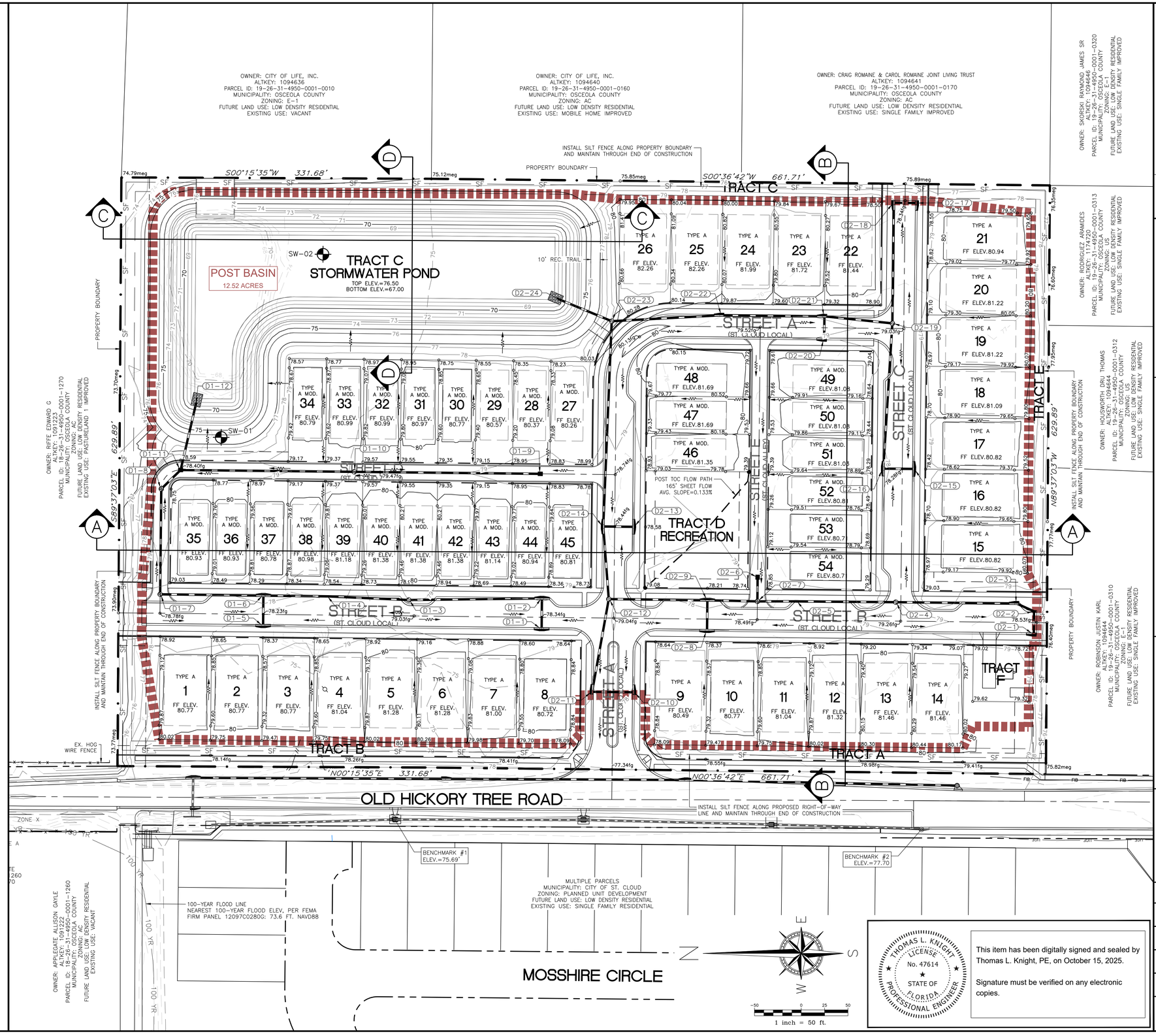
TYPE A



TYPE A MODIFIED

TYPE C MODIFIED

TYPICAL LOT GRADING DETAIL
NOT TO SCALE



REVISION	DATE
Revised per St. Cloud comments dated Sep. 5, 2025	Oct. 2025

Knight Engineering Services

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770 Almond Street, Suite B, Clermont, Florida 34711
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OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

GRADING AND DRAINAGE PLAN

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
October 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
1" = 50'

SHEET NUMBER
06

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

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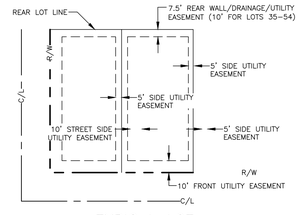
SANITARY STRUCTURE TABLE			
ID:	DETAILS:	PIPES IN:	PIPES OUT
S-1	4' MH RIM = 79.32	INV IN 6"(NE)=74.01' | FROM LAT'L	INV OUT 8"(S)=73.84 | 310.3' OF 8" SDR35 @ 0.40% TO S-2
S-2	4' MH RIM = 78.69	INV IN 8"(N)=72.60' | FROM S-1	INV OUT 8"(E)=72.50 | 119.1' OF 8" SDR35 @ 0.40% TO S-3
S-3	4' MH RIM = 79.99	INV IN 8"(W)=72.02' | FROM S-2	INV OUT 8"(SE)=71.90 | 47.3' OF 8" SDR35 @ 0.40% TO S-4
S-4	4' MH (POLYMER CONCRETE) RIM = 80.02	INV IN 8"(NW)=71.71' | FROM S-3	INV OUT 8"(S)=71.60 | 264.5' OF 8" SDR35 @ 0.40% TO S-6
S-5	4' MH (POLYMER CONCRETE) RIM = 78.75	INV IN 6"(SE)=74.05' | FROM LAT'L	INV OUT 8"(W)=73.88 | 60.8' OF 8" SDR35 @ 1.00% TO S-6
S-6	5' DROP MH RIM = 79.00	INV IN 8"(N)=70.54' | FROM S-4 INV IN 8"(E)=73.27' | FROM S-5	INV OUT 8"(W)=70.40 | 308.0' OF 8" SDR35 @ 0.52% TO S-9
S-7	4' MH RIM = 78.43	INV IN 6"(NE)=71.97' | FROM LAT'L INV IN 6"(NW)=71.97' | FROM LAT'L	INV OUT 8"(S)=71.81 | 351.4' OF 8" SDR35 @ 0.40% TO S-8
S-8	4' MH RIM = 78.41	INV IN 8"(N)=70.40' | FROM S-7	INV OUT 8"(S)=70.30 | 376.0' OF 8" SDR35 @ 0.40% TO S-9
S-9	4' MH (POLYMER CONCRETE) RIM = 79.24	INV IN 8"(N)=68.80' | FROM S-8 INV IN 8"(E)=68.80' | FROM S-6	INV OUT 8"(S)=68.70 | 78.5' OF 8" SDR35 @ 0.40% TO S-10
S-10	4' MH (POLYMER CONCRETE) RIM = 78.73	INV IN 8"(N)=68.39' | FROM S-9	INV OUT 8"(W)=68.29 | 49.5' OF 8" SDR35 @ 0.40% TO S-11
S-11	5' MH (POLYMER CONCRETE) RIM = 79.60	INV IN 8"(E)=68.09' | FROM S-10	INV OUT 10"(S)=67.99 | 24.7' OF 10" DR-11 HDPE @ 1.00% TO WW-1
WW-1	8' WW (POLYMER CONCRETE) RIM = 80.00	INV IN 10"(N)=67.74' | FROM S-11	
XS-1	5' MH (INSTALL LINER PER TWA SPECS) RIM = 76.47	INV IN 8"(S)=62.93' | FROM EX. MH INV IN 8"(N)=63.13' | FROM EX. MH INV IN 4"(NE)=63.15' | FROM FM	INV OUT 8"(W)=62.75 | 13.8' OF 8" DIP @ 0.40% TO EX. MH



TYPICAL LOT EASEMENTS

NOT TO SCALE

UTILITY NOTES:

1. THE PROJECT WILL BE SERVED BY A CENTRAL SEWER SYSTEM, A CENTRAL POTABLE WATER SYSTEM, AND A CENTRAL RECLAIMED WATER SYSTEM
2. THE PROPOSED 4" SANITARY SEWER FORCE MAIN SHALL CONNECT, VIA CORE DRILL, TO THE EXISTING MANHOLE LOCATED APPROXIMATELY 800 FEET SOUTHWEST OF THE PROJECT ENTRANCE AT THE INTERSECTION OF GRAMERCY FARMS BLVD AND MOSSHIRE CIRCLE
3. FOR DOUBLE AND SINGLE SANITARY SERVICES TOHO WATER AUTHORITY'S MAINTENANCE RESPONSIBILITY SHALL END AT THE SINGLE 6" RISER AT THE PROPERTY LINE.
4. THE PROPOSED 8" POTABLE WATER MAIN SHALL CONNECT TO THE EXISTING 16" POTABLE WATER MAIN LOCATED APPROXIMATELY 700 FEET SOUTH OF THE PROJECT ENTRANCE AT THE INTERSECTION OF OLD HICKORY TREE ROAD AND GRAMERCY FARMS BLVD. AND TO THE EXISTING 8" POTABLE WATER MAIN LOCATED APPROXIMATELY 300 FEET NORTH OF THE PROJECT ENTRANCE, WITHIN MOSSHIRE CIRCLE RIGHT-OF-WAY (SEE PLAN).
5. THE PROPOSED 8" RECLAIMED WATER MAIN SHALL CONNECT TO THE EXISTING 24" RECLAIMED WATER MAIN LOCATED APPROXIMATELY 700 FEET SOUTH OF THE PROJECT ENTRANCE AT THE INTERSECTION OF OLD HICKORY TREE ROAD AND GRAMERCY FARMS BLVD. AND TO THE EXISTING 8" RECLAIMED WATER MAIN LOCATED APPROXIMATELY 1,000 FEET NORTH OF THE PROJECT ENTRANCE ON OLD HICKORY TREE RD.
6. ALL UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH APPLICABLE REQUIREMENTS OF THE CITY OF ST. CLOUD, TOHO WATER AUTHORITY (TWA) AND FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP)
7. THE RECLAIMED WATER SYSTEM SHALL HAVE NEVER BEEN WETTED WITH ANY TYPE OF NON-POTABLE WATER AND SHALL HAVE NEVER BEEN PREVIOUSLY USED TO CARRY FLOWS ASIDE FROM POTABLE WATER
8. ALL PURPLE PIPES CONSTRUCTED AS PART OF THE RECLAIMED WATER SYSTEM SHALL NEVER BE USED TO CONVEY DRINKING WATER AT ANY TIME IN THE FUTURE
9. ALL POTABLE WATER PIPES SHALL BE COLOR CODED BLUE, ALL RECLAIMED WATER PIPES SHALL BE COLOR CODED PURPLE AND ALL SANITARY SEWER PIPES SHALL BE COLOR CODED GREEN
10. WATER SERVICES 2" AND SMALLER SHALL UTILIZE A DOUBLE STRAP TAPPING SADDLE, A CORPORATION STOP, AND BLUE PE TUBING. NO FITTINGS ALLOWED BETWEEN CORP. STOP AND CURB STOP.
11. REUSE SERVICES 2" AND SMALLER SHALL UTILIZE A DOUBLE STRAP TAPPING SADDLE, A CORPORATION STOP, AND PURPLE PE TUBING. NO FITTINGS ALLOWED BETWEEN CORP. STOP AND CURB STOP.
12. ALL PROPOSED LANDSCAPING SHALL MAINTAIN 5 FEET HORIZONTAL SEPARATION FROM THE ROOT BALL OF TREES TO TOHO MAINTAINED UTILITIES.
13. ALL PROPOSED POLES (SIGN, TRAFFIC, LIGHT, ETC.) SHALL MAINTAIN A 6-FOOT MINIMUM, 10-FOOT PREFERRED, HORIZONTAL SEPARATION FROM TOHO MAINTAINED UTILITIES.
14. PERMANENT STRUCTURES SHALL MAINTAIN A MINIMUM 15 FEET OF HORIZONTAL SEPARATION FROM TOHO MAINTAINED UTILITIES.

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

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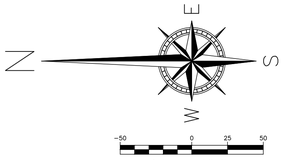

REVISION	DATE
Revised per St. Cloud comments dated 9-5-25	Oct. 2025

Knight Engineering Services

Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

MASTER UTILITY PLAN

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
October 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
1" = 50'

SHEET NUMBER
07

UTILITY NOTES:

1. THE PROJECT WILL BE SERVED BY A CENTRAL SEWER SYSTEM, A CENTRAL POTABLE WATER SYSTEM, AND A CENTRAL RECLAIMED WATER SYSTEM.
2. THE PROPOSED 4" SANITARY SEWER FORCE MAIN SHALL CONNECT, VIA CORE DRILL, TO THE EXISTING MANHOLE LOCATED APPROXIMATELY 800 FEET SOUTHWEST OF THE PROJECT ENTRANCE AT THE INTERSECTION OF GRAMERCY FARMS BLVD AND MOSSHIRE CIRCLE
3. FOR DOUBLE AND SINGLE SANITARY SERVICES TOHO WATER AUTHORITY'S MAINTENANCE RESPONSIBILITY SHALL END AT THE SINGLE 6" RISER AT THE PROPERTY LINE.
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6. ALL UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH APPLICABLE REQUIREMENTS OF THE CITY OF ST. CLOUD, TOHO WATER AUTHORITY (TWA) AND FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP)
7. THE RECLAIMED WATER SYSTEM SHALL HAVE NEVER BEEN WETTED WITH ANY TYPE OF NON-POTABLE WATER AND SHALL HAVE NEVER BEEN PREVIOUSLY USED TO CARRY FLOWS ASIDE FROM POTABLE WATER
8. ALL PURPLE PIPES CONSTRUCTED AS PART OF THE RECLAIMED WATER SYSTEM SHALL NEVER BE USED TO CONVEY DRINKING WATER AT ANY TIME IN THE FUTURE
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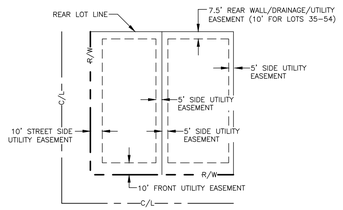
14. PERMANENT STRUCTURES SHALL MAINTAIN A MINIMUM 15 FEET OF HORIZONTAL SEPARATION FROM TOHO MAINTAINED UTILITIES.



TYPICAL LOT EASEMENTS
NOT TO SCALE

OWNER: CITY OF LIFE, INC.
ALTKEY: 1094636
PARCEL ID: 19-26-31-4950-0001-0010
MUNICIPALITY: OSCEOLA COUNTY
ZONING: E-1
FUTURE LAND USE: LOW DENSITY RESIDENTIAL
EXISTING USE: VACANT

OWNER: CITY OF LIFE, INC.
ALTKEY: 1094640
PARCEL ID: 19-26-31-4950-0001-0160
MUNICIPALITY: OSCEOLA COUNTY
ZONING: AC
FUTURE LAND USE: LOW DENSITY RESIDENTIAL
EXISTING USE: MOBILE HOME IMPROVED

OWNER: CRAIG ROMAINE & CAROL ROMAINE JOINT LIVING TRUST
ALTKEY: 1094641
PARCEL ID: 19-26-31-4950-0001-0170
MUNICIPALITY: OSCEOLA COUNTY
ZONING: AC
FUTURE LAND USE: LOW DENSITY RESIDENTIAL
EXISTING USE: SINGLE FAMILY IMPROVED

OWNER: SKORSKI, RAYMOND JAMES SR
ALTKEY: 1094646
PARCEL ID: 19-26-31-4950-0001-0320
MUNICIPALITY: OSCEOLA COUNTY
ZONING: E-1
FUTURE LAND USE: LOW DENSITY RESIDENTIAL
EXISTING USE: SINGLE FAMILY IMPROVED

OWNER: RODRIGUEZ, ARAMIDES
ALTKEY: 1174720
PARCEL ID: 19-26-31-4950-0001-0313
MUNICIPALITY: OSCEOLA COUNTY
ZONING: US
FUTURE LAND USE: LOW DENSITY RESIDENTIAL
EXISTING USE: SINGLE FAMILY IMPROVED

OWNER: HOUSWORTH DRU THOMAS
ALTKEY: 1094644
PARCEL ID: 19-26-31-4950-0001-0312
MUNICIPALITY: OSCEOLA COUNTY
ZONING: US
FUTURE LAND USE: LOW DENSITY RESIDENTIAL
EXISTING USE: SINGLE FAMILY IMPROVED

OWNER: ROBINSON, JUSTIN KARL
ALTKEY: 1094644
PARCEL ID: 19-26-31-4950-0001-0310
MUNICIPALITY: OSCEOLA COUNTY
ZONING: E-1
FUTURE LAND USE: LOW DENSITY RESIDENTIAL
EXISTING USE: SINGLE FAMILY IMPROVED

OWNER: RIFFE, EDWARD G
ALTKEY: 1091223
PARCEL ID: 13-25-29-0001-1270
MUNICIPALITY: OSCEOLA COUNTY
ZONING: AC
FUTURE LAND USE: LOW DENSITY RESIDENTIAL
EXISTING USE: PASTURELAND 1 IMPROVED

OWNER: APPLEGATE ALLISON GAYLE
ALTKEY: 1091222
PARCEL ID: 13-25-29-0001-1260
MUNICIPALITY: OSCEOLA COUNTY
ZONING: AC
FUTURE LAND USE: LOW DENSITY RESIDENTIAL
EXISTING USE: VACANT

PROPERTY BOUNDARY
S00°15'35"W 331.68'
S89°37'03"E 629.89'
N00°15'35"E 331.68'
S00°36'42"W 661.71'
N89°37'03"W 629.89'
EXISTING 30' UTILITY ESMT.
EXIST. 20' FM
EX. HOG WIRE FENCE
TRACT C
STORMWATER POND
TRACT B
TRACT A
TRACT D
RECREATION
TRACT E
TRACT
STREET A (ST. CLOUD LOCAL)
STREET B (ST. CLOUD LOCAL)
STREET C (ST. CLOUD LOCAL)
STREET D (ST. CLOUD ALLEY)
STREET E (ST. CLOUD ALLEY)
OLD HICKORY TREE ROAD
MOSSHIRE CIRCLE
1 2 3 4 5 6 7 8
9 10 11 12 13 14
15 16 17 18 19 20 21
22 23 24 25 26
27 28 29 30 31 32 33 34
35 36 37 38 39 40 41 42 43 44 45
46 47 48 49 50 51 52 53 54
10' U.E.
20' U.E.
6"G.V.
8"WM
4"RM
8"SS
4"G.V.
8"G.V.
4" G.V. AND CAP WITH 2" BLOW-OFF
8" G.V. AND CAP WITH 2" BLOW-OFF
4"TEE (2) 4"G.V. (S&E)
4"TEE (2)4"G.V.s (E,S)
4"TEE (2) 4"G.V. (E&N)
4"TEE (2)4"G.V.s (N,E)
8"x6"TEE 8"G.V. (S) 6"G.V.(E)
8"x6"TEE (2)8"G.V.s (E,W) 6"G.V. (N)
8"TEE (3)8"G.V.s (N,E,W)
8"TEE (3)8"G.V.s (N,E,S)
8" TEE; (3) 8" G.V.s (N,S,W)
8" TEE; (3) 8" G.V. (N,E,S)
8"x4" TEE; (2) 8" G.V. (N&S) 4" G.V. (E)
8" CROSS; (4)8"G.V.s (N,S,E,W)
FIRE HYDRANT
(2) 45° BENDS
8" DIA. LIFT STATION WITH ODOR CONTROL UNIT
MONITORING METER AND RPZ BACKFLOW PREVENTER
REFER TO OFFSITE UTILITY SHEET FOR OFFSITE UTILITY INFORMATION
EXISTING 6" RECLAIM WATER MAIN
POTABLE WATER P.O.C. #2
CONNECT TO EXISTING 8" POTABLE MAIN
INSTALL TEMPORARY JUMPER CONNECTION
MULTIPLE PARCELS
MUNICIPALITY: CITY OF ST. CLOUD
ZONING: PLANNED UNIT DEVELOPMENT
FUTURE LAND USE: LOW DENSITY RESIDENTIAL
EXISTING USE: SINGLE FAMILY RESIDENTIAL
100-YEAR FLOOD LINE
NEAREST 100-YEAR FLOOD ELEV. PER FEMA FIRM PANEL 12097C0280G: 73.6 FT. NAVD88
ZONE X
100 YR
N
S
E
W
-50 0 25 50
1 inch = 50 ft.

REVISION	DATE
Revised per St. Cloud comments dated Sep. 5, 2025	Oct. 2025

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Planning, Design, Permitting, Inspection
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OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

UTILITY PLAN

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Thomas L. Knight, PE, on October 15, 2025.

Signature must be verified on any electronic copies.

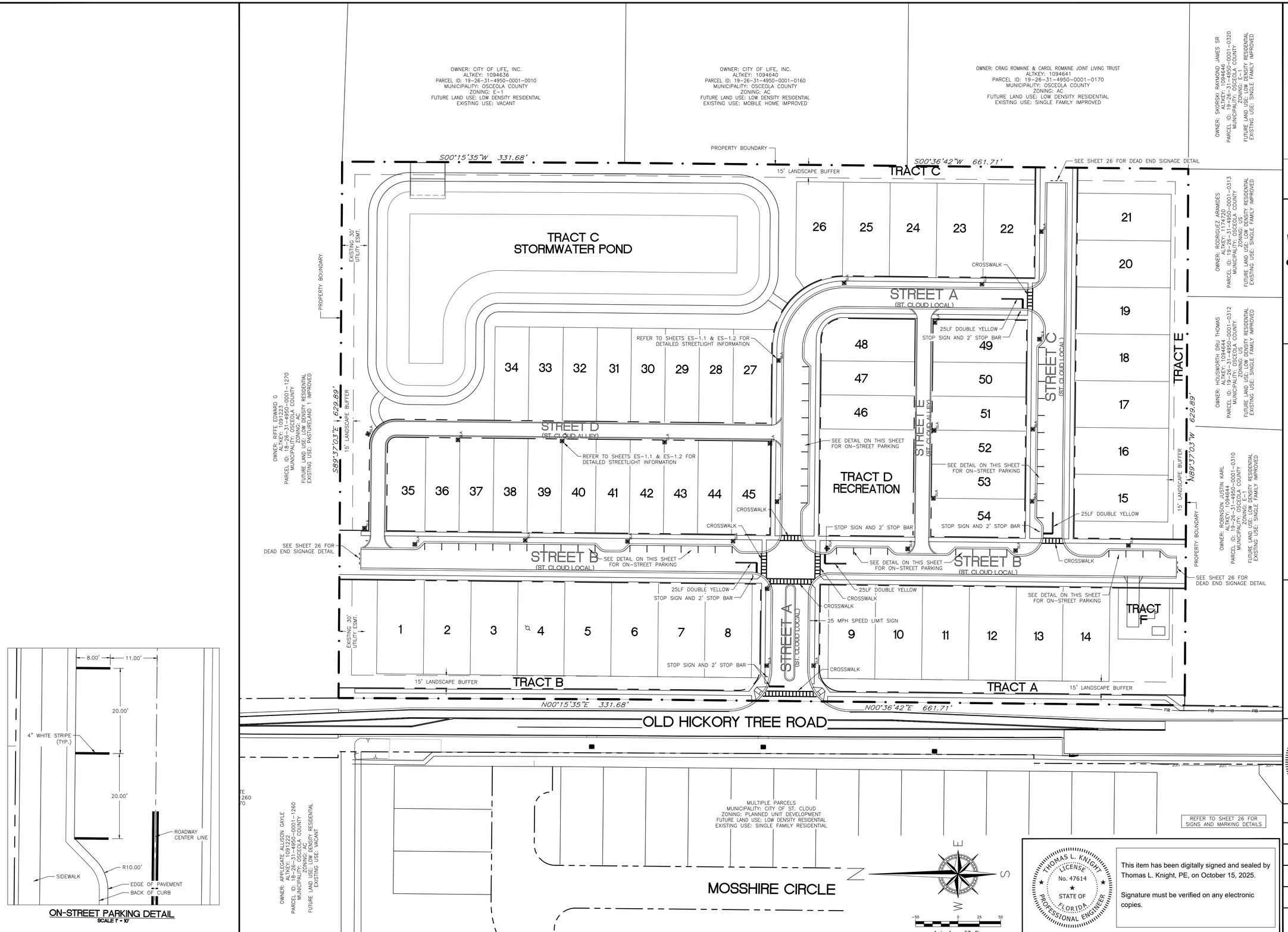
DATE
October 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
1" = 50'

SHEET NUMBER
08



ON-STREET PARKING DETAIL
SCALE 1" = 10'

REVISION	DATE
Revised per St. Cloud comments dated Sep. 5, 2025	Oct. 2025

Knight Engineering Services

Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

SIGNAGE, MARKING, AND LIGHTING PLAN

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
October 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
1" = 50'

SHEET NUMBER
09

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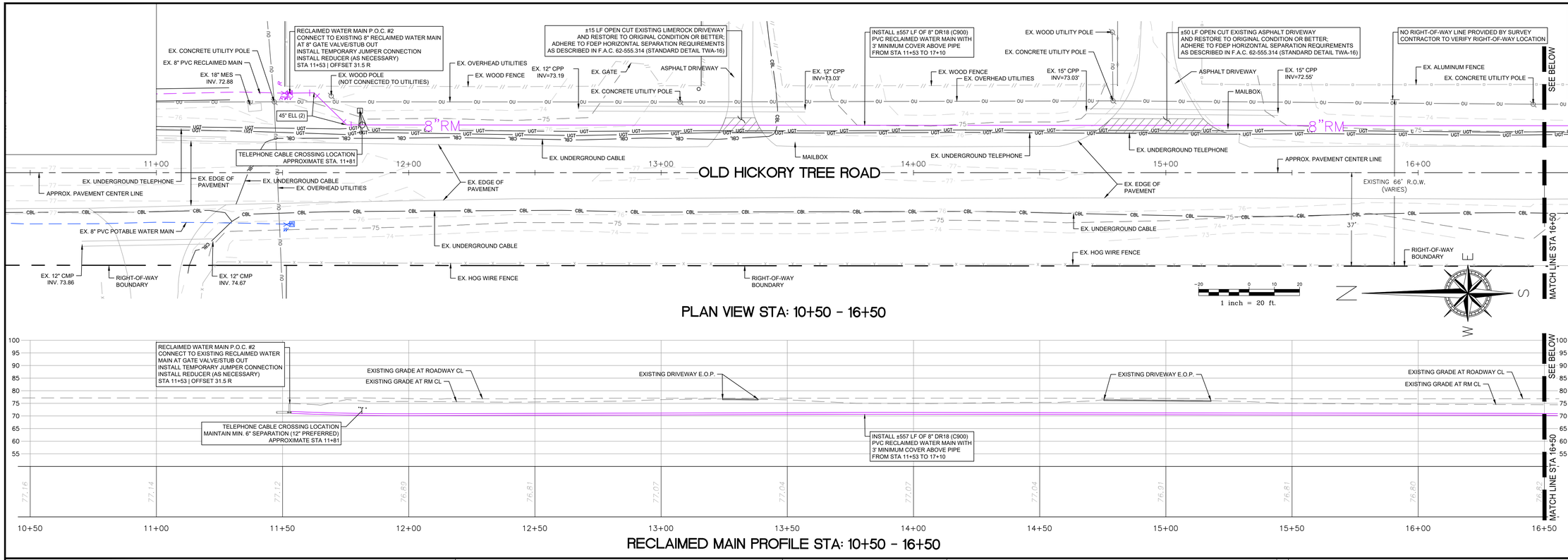

REVISION

DATE	
Oct. 2025	Revised per St. Cloud comments dated Sep. 5, 2025

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225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

OFFSITE UTILITY PLAN 1

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

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THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

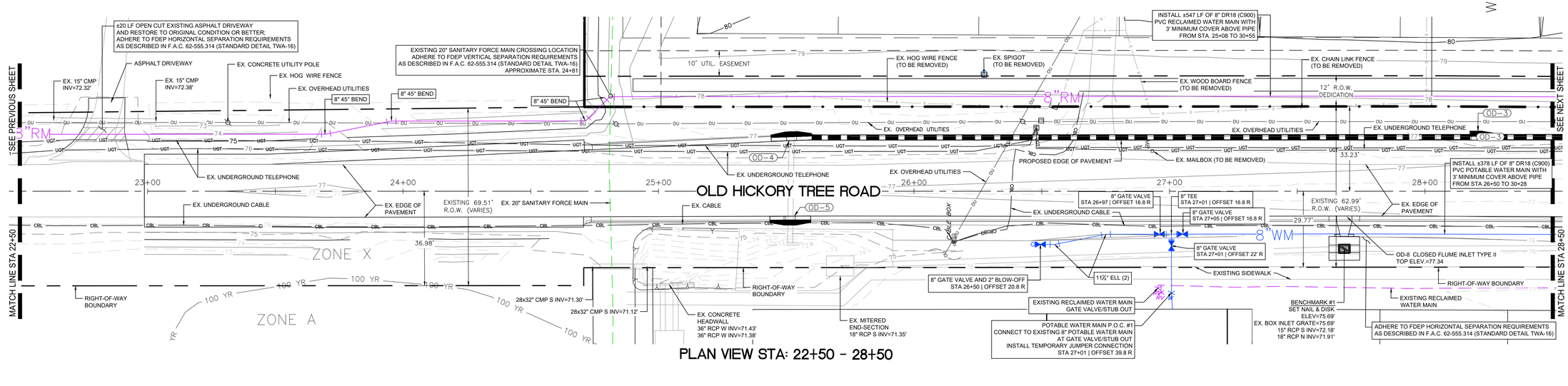
DATE
October 2025

DRAWN BY
TLK/JMK

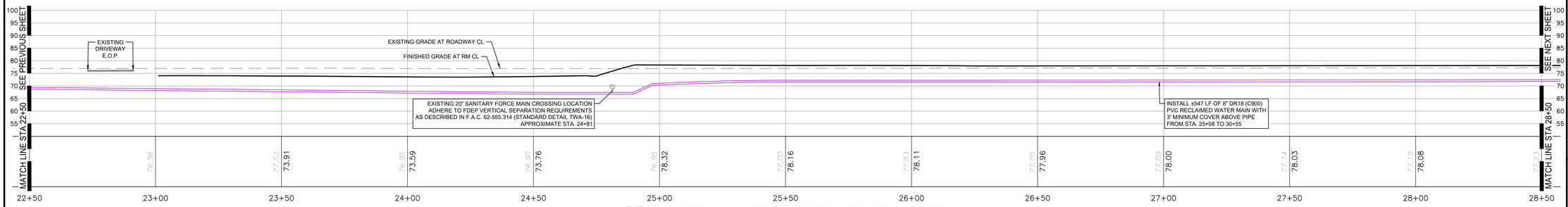
PROJECT NUMBER
23-12

SCALE
1" = 20'

SHEET NUMBER
10



PLAN VIEW STA: 22+50 - 28+50



RECLAIMED MAIN PROFILE STA: 22+50 - 28+50

GENERAL NOTES:

- THE TERMS DIRECTIONAL BORE, HORIZONTAL DIRECTIONAL DRILLING OR HDD ARE USED ON THESE PLANS INTERCHANGEABLY
- PROPOSED FORCE MAIN INSTALLATION SHALL BE VIA OPEN CUT TRENCH UNLESS OTHERWISE SPECIFIED
- ALL DISTURBED AREAS SHALL BE SODDED
- ALL DISTURBED DRIVEWAYS SHALL BE RESTORED TO ORIGINAL CONDITIONS OR BETTER
- THE CONTRACTOR SHALL NOT COMPLETELY BLOCK ANY DRIVEWAY, PAVED OR UNPAVED
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- ALL PIPE SEPARATION REQUIREMENTS SHALL BE MET IN ACCORDANCE WITH FDEP STANDARDS, F.A.C. RULE 62-555.314 AND THE LATEST EDITIONS OF TOHO WATER AUTHORITY (TWA) STANDARDS, SPECIFICATIONS AND DETAILS
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- REUSE SERVICES 2" AND SMALLER SHALL UTILIZE A DOUBLE STRAP TAPPING SADDLE, A CORPORATION STOP, AND PURPLE PE TUBING. NO FITTINGS ALLOWED BETWEEN CORP. STOP AND CURB STOP.
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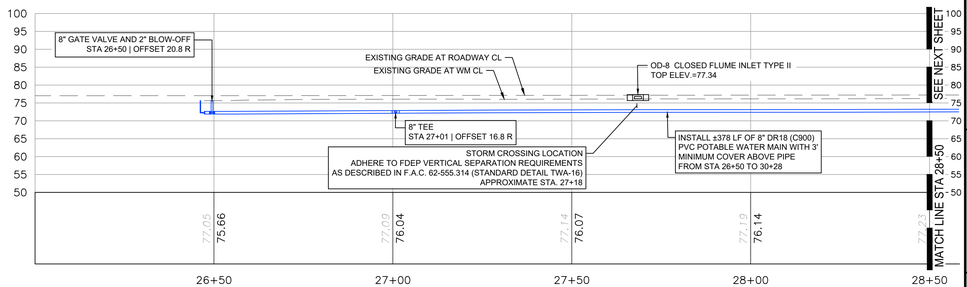
- PERMANENT STRUCTURES SHALL MAINTAIN A MINIMUM 15 FEET OF HORIZONTAL SEPARATION FROM TOHO MAINTAINED UTILITIES.

LEGEND

- RIGHT-OF-WAY LINE
- CENTER LINE
- PROPOSED POTABLE WATER MAIN (BURIED)
- PROPOSED RECLAIMED WATER MAIN (BURIED)
- PROPOSED SANITARY FORCE MAIN (BURIED)
- EXISTING POTABLE WATER MAIN (BURIED)
- EXISTING RECLAIMED WATER MAIN (BURIED)
- EXISTING SANITARY FORCE MAIN (BURIED)
- EXISTING RECLAIMED WATER MAIN (BURIED)
- EXISTING SANITARY FORCE MAIN (BURIED)
- CBL — EXISTING CABLE (BURIED)
- UGT — EXISTING TELEPHONE (BURIED)
- OU — EXISTING OVERHEAD UTILITY LINE
- X131.80 EXISTING GROUND SPOT ELEVATION



WATER MAIN PROFILE STA: 26+50 - 28+50

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OLD HICKORY TREE ESTATES

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OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

OFFSITE UTILITY PLAN 2

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

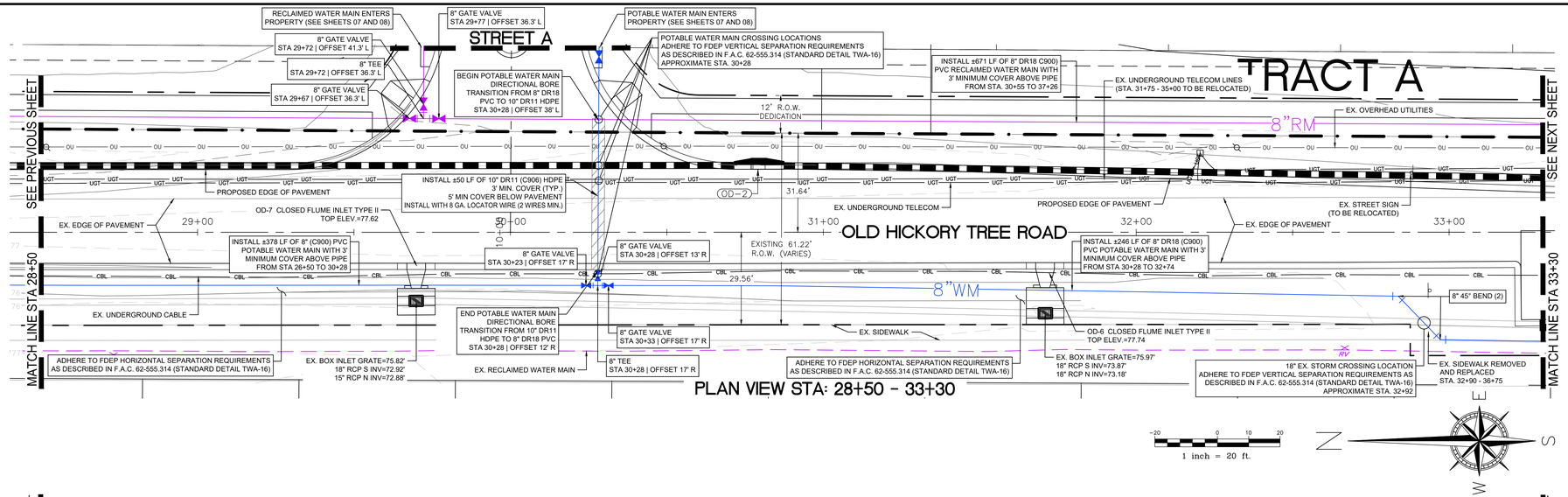
DATE
October 2025

DRAWN BY
TLK/JMK

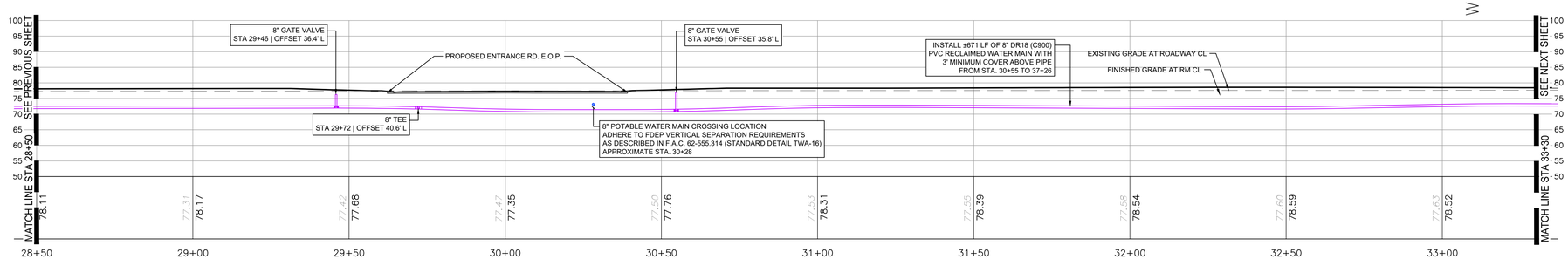
PROJECT NUMBER
23-12

SCALE
1" = 20'

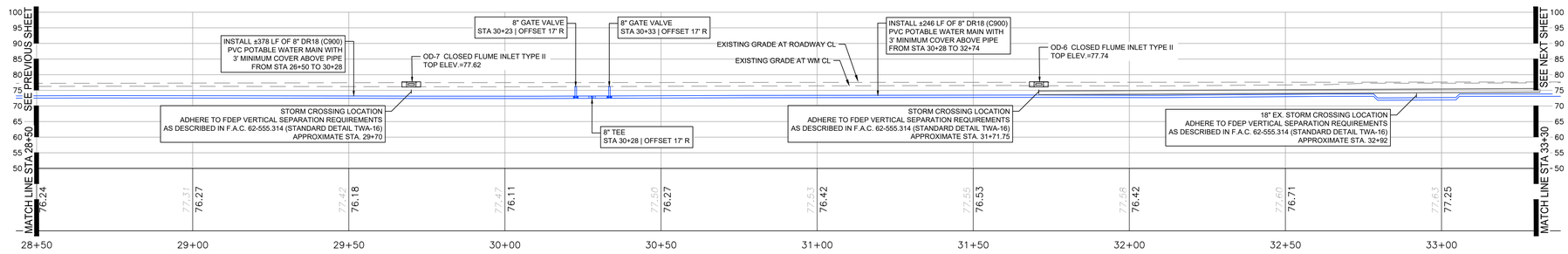
SHEET NUMBER
11



PLAN VIEW STA: 28+50 - 33+30



RECLAIMED MAIN PROFILE STA: 28+50 - 33+30



WATER MAIN PROFILE STA: 28+50 - 33+30

GENERAL NOTES:

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LEGEND

- RIGHT-OF-WAY LINE
- CENTER LINE
- PROPOSED POTABLE WATER MAIN (BURIED)
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- EXISTING RECLAIMED WATER MAIN (BURIED)
- EXISTING SANITARY FORCE MAIN (BURIED)
- CBL — CBL — EXISTING CABLE (BURIED)
- UGT — UGT — EXISTING TELEPHONE (BURIED)
- OU — OU — OU — EXISTING OVERHEAD UTILITY LINE
- ×131.80 EXISTING GROUND SPOT ELEVATION

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

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OLD HICKORY TREE ESTATES

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OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

OFFSITE UTILITY PLAN 3

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
October 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
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SCALE
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SHEET NUMBER
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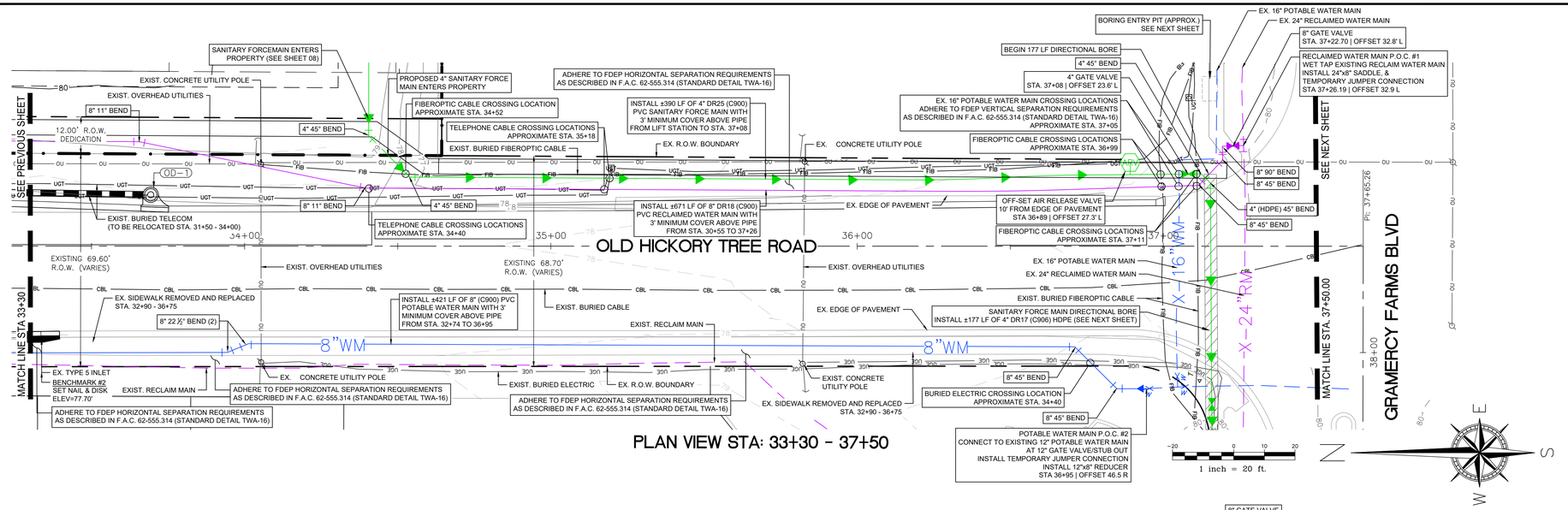

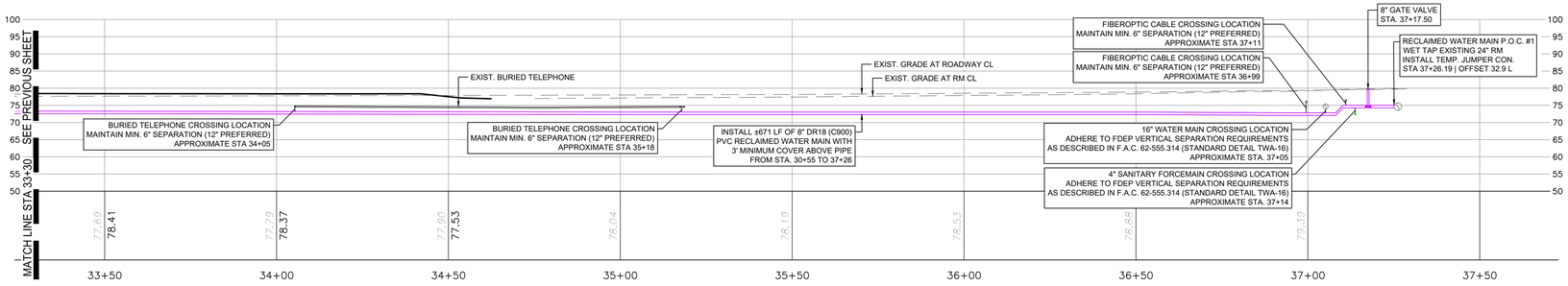

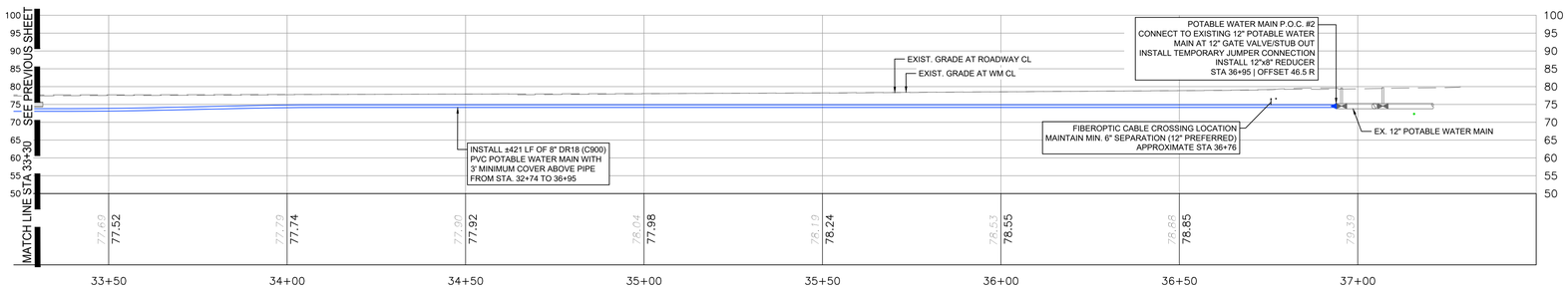

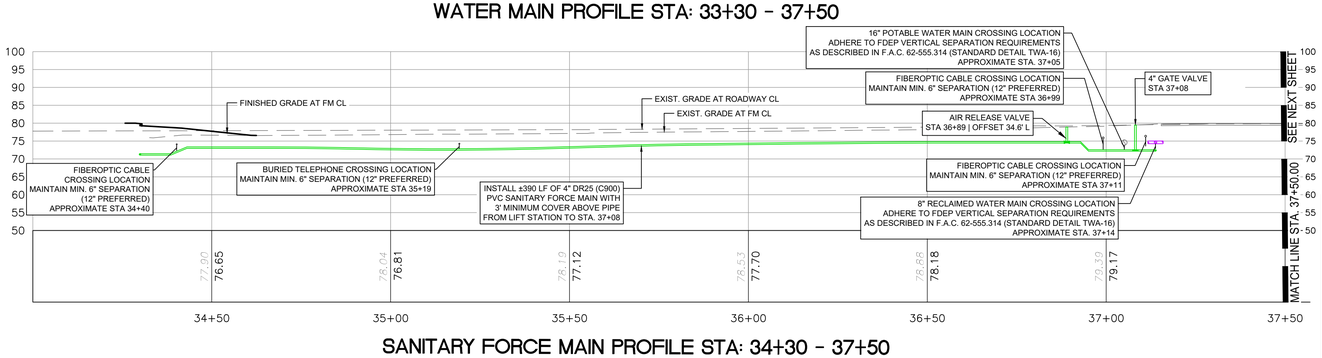

LEGEND

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THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

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OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

OFFSITE UTILITY PLAN 4

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
October 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
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SHEET NUMBER
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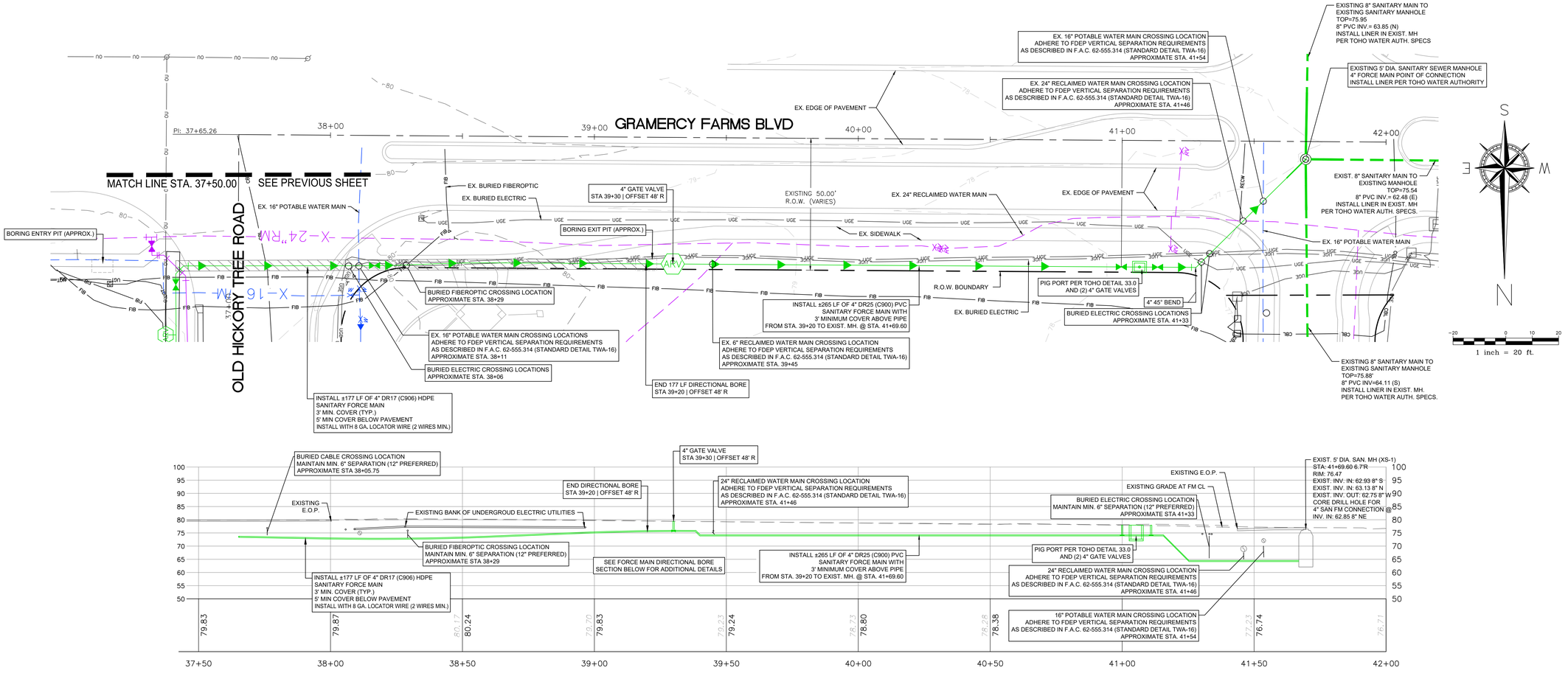

SANITARY FORCE MAIN PROFILE STA: 37+50 - 41+69.60

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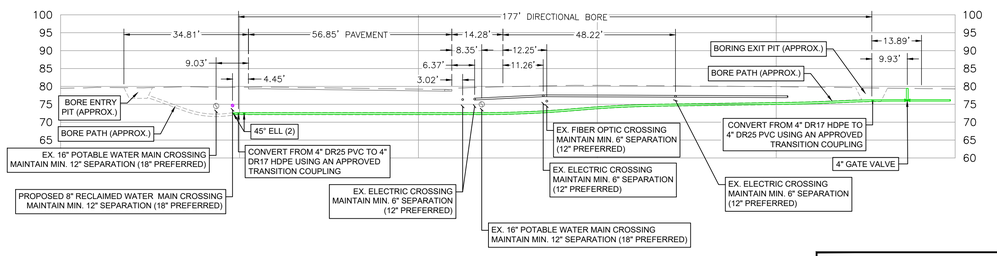
- THE APPROXIMATE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR; UNLESS NOTED, ACTUAL SIZES AND DEPTHS OF EXISTING UNDERGROUND UTILITIES HAVE NOT BEEN SURVEYED AND MUST BE VERIFIED BY THE CONTRACTOR IN THE FIELD PRIOR TO CONSTRUCTION
- THE CONTRACTOR SHALL COORDINATE ADJUSTMENTS TO THE UNDERGROUND FIBER OPTIC, TELEPHONE AND ELECTRIC CABLES AS NECESSARY TO AVOID CONFLICTS WITH THE PROPOSED SANITARY FORCE MAIN
- ALL PIPE SEPARATION REQUIREMENTS SHALL BE MET IN ACCORDANCE WITH FDEP STANDARDS, F.A.C. RULE 62-555.314 AND THE LATEST EDITIONS OF TOHO WATER AUTHORITY (TWA) STANDARDS, SPECIFICATIONS AND DETAILS
- THE MEASURED LENGTH OF DIRECTIONAL BORES REFERS TO THE ANTICIPATED JUNCTION OF THE PROPOSED PVC AND HDPE PIPES; THE ACTUAL DISTANCE AND ANGLES OF DRILLING OPERATIONS FOR DIRECTIONAL BORES TO BE DETERMINED BY THE CONTRACTOR
- ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES SHALL BE REPAIRED AT THE SOLE EXPENSE OF THE CONTRACTOR
- RECLAIMED WATER MAIN CONSTRUCTION SHALL CONFORM TO THE LATEST EDITIONS OF TWA STANDARDS, SPECIFICATIONS AND DETAILS
- HDD OPERATIONS SHALL CONFORM TO THE LATEST EDITIONS OF TWA STANDARDS, SPECIFICATIONS AND DETAILS
- MAINTENANCE OF TRAFFIC SHALL CONFORM TO FDOT STANDARD PLANS INDEX (PREFIX 102) 600-608, 625, 628, 650 & 655 AS APPLICABLE
- RESTRAINED JOINTS SHALL BE PROVIDED AT ALL BENDS, WYES, TEES, CAPS, VALVES AND REDUCERS PER TWA SPECIFICATIONS
- WATER SERVICES 2" AND SMALLER SHALL UTILIZE A DOUBLE STRAP TAPPING SADDLE, A CORPORATION STOP, AND BLUE PE TUBING. NO FITTINGS ALLOWED BETWEEN CORP. STOP AND CURB STOP.
- REUSE SERVICES 2" AND SMALLER SHALL UTILIZE A DOUBLE STRAP TAPPING SADDLE, A CORPORATION STOP, AND PURPLE PE TUBING. NO FITTINGS ALLOWED BETWEEN CORP. STOP AND CURB STOP.
- ALL PROPOSED LANDSCAPING SHALL MAINTAIN 5 FEET HORIZONTAL SEPARATION FROM THE ROOT BALL OF TREES TO TOHO MAINTAINED UTILITIES.
- ALL PROPOSED POLES (SIGN, TRAFFIC, LIGHT, ETC.) SHALL MAINTAIN A 6-FOOT MINIMUM, 10-FOOT PREFERRED, HORIZONTAL SEPARATION FROM TOHO MAINTAINED UTILITIES.
- PERMANENT STRUCTURES SHALL MAINTAIN A MINIMUM 15 FEET OF HORIZONTAL SEPARATION FROM TOHO MAINTAINED UTILITIES.

LEGEND

- RIGHT-OF-WAY LINE
- CENTER LINE
- PROPOSED POTABLE WATER MAIN (BURIED)
- PROPOSED RECLAIMED WATER MAIN (BURIED)
- PROPOSED SANITARY FORCE MAIN (BURIED)
- EXISTING POTABLE WATER MAIN (BURIED)
- EXISTING RECLAIMED WATER MAIN (BURIED)
- EXISTING SANITARY FORCE MAIN (BURIED)
- EXISTING RECLAIMED WATER MAIN (BURIED)
- EXISTING SANITARY FORCE MAIN (BURIED)
- CBL — CBL — EXISTING CABLE (BURIED)
- UGT — UGT — EXISTING TELEPHONE (BURIED)
- OU — OU — OU — EXISTING OVERHEAD UTILITY LINE
- ×131.80 EXISTING GROUND SPOT ELEVATION



FORCE MAIN DIRECTIONAL BORE SECTION

SCALE 1" = 20'

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

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DATE	REVISION
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Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
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Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

OFFSITE UTILITY PLAN 5

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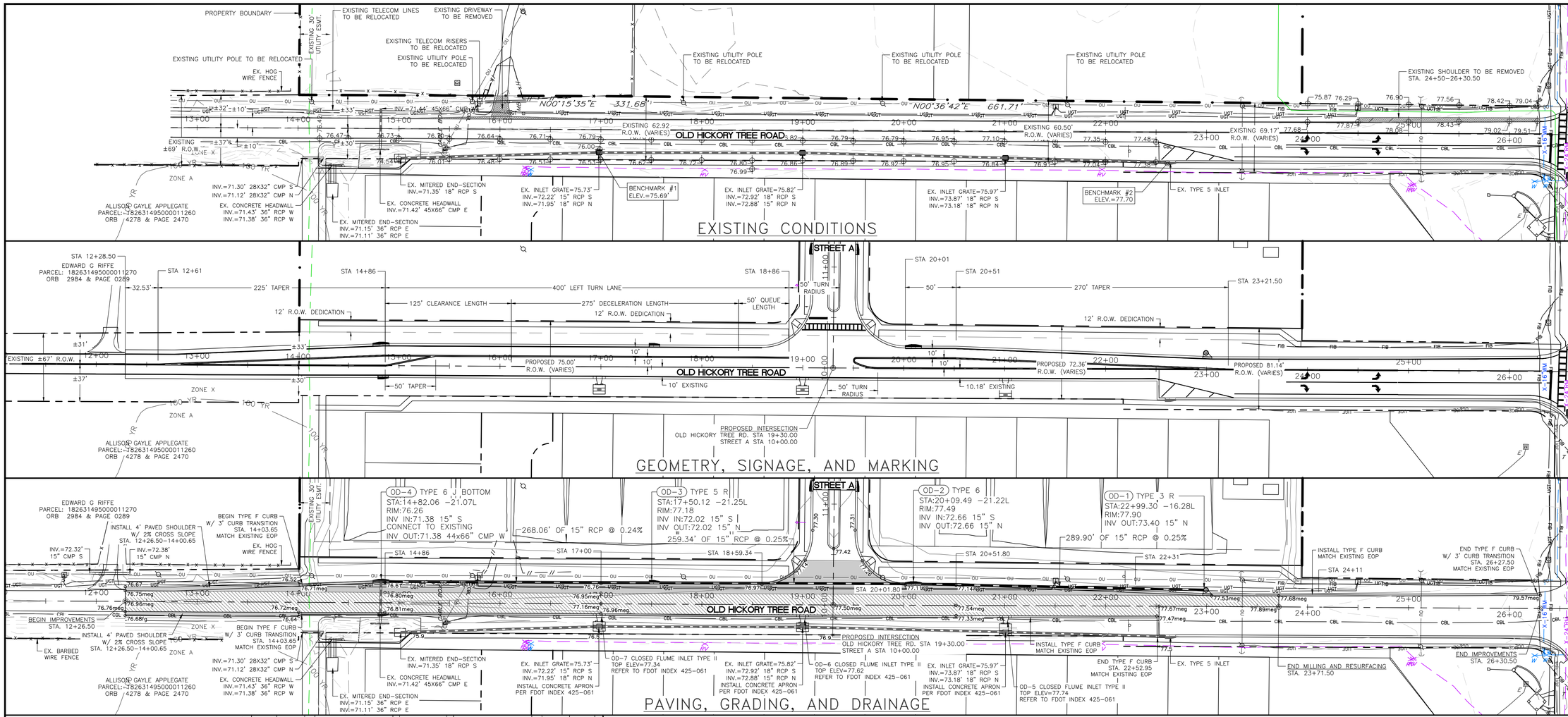
THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE	October 2025
DRAWN BY	TLK/JMK
PROJECT NUMBER	23-12
SCALE	1" = 20'
SHEET NUMBER	14



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OFFSITE IMPROVEMENTS OLD HICKORY TREE ROAD

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
October 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
1" = 50'

SHEET NUMBER
15

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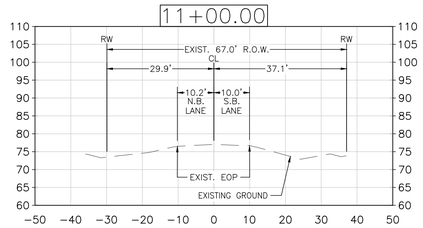

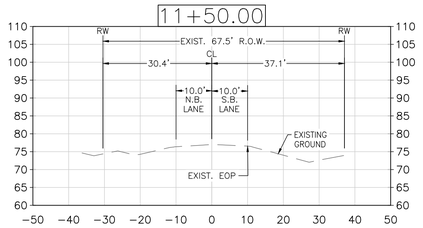

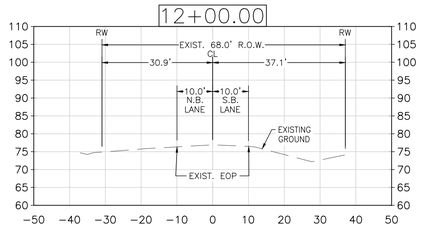

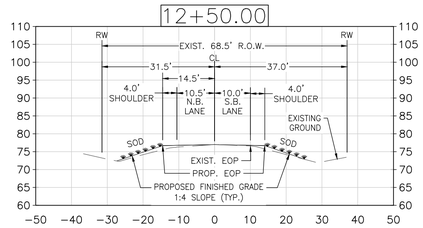

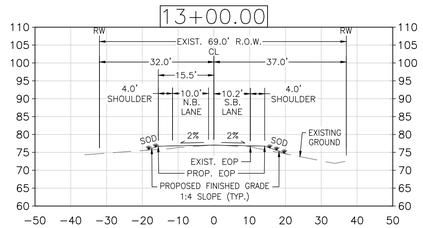

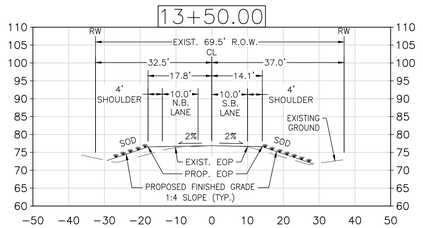

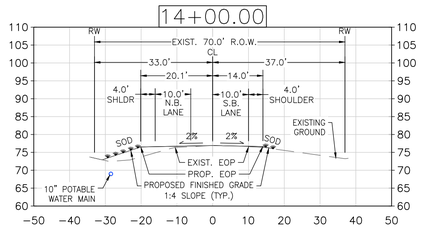

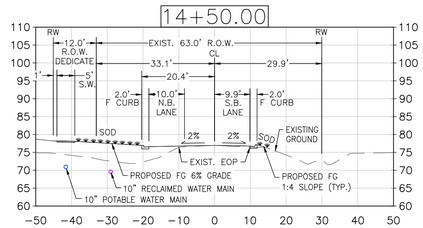

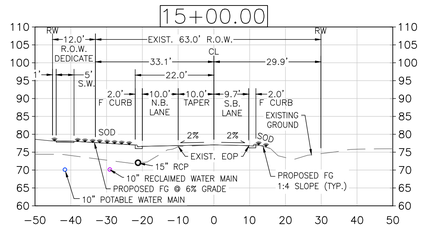

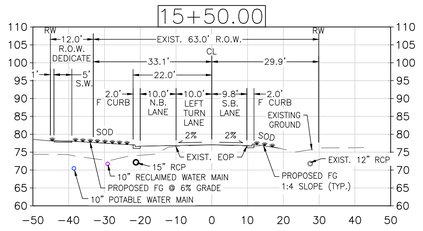

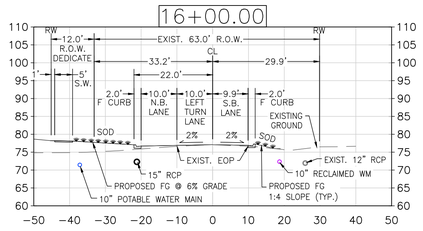

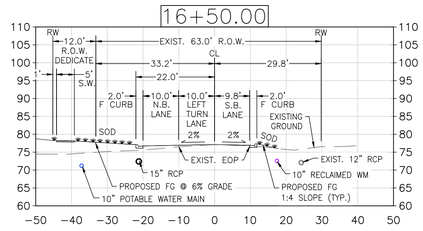

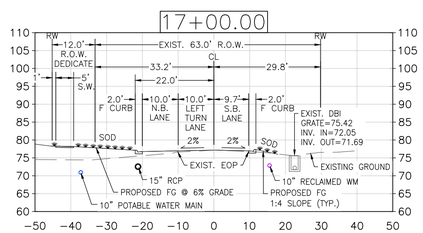

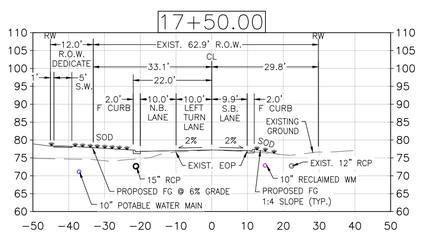

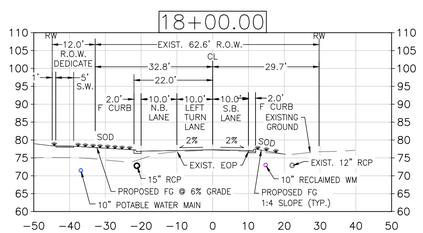

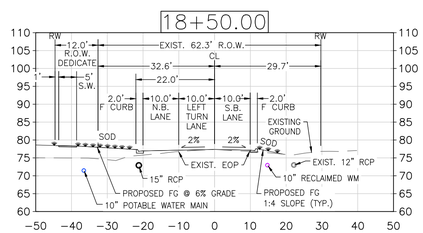

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OLD HICKORY TREE ESTATES

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225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

OLD HICKORY TREE ROAD CROSS SECTIONS

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
October 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
1" = 20'

SHEET NUMBER
16

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

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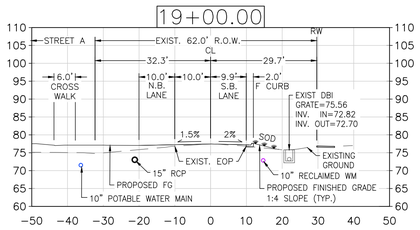

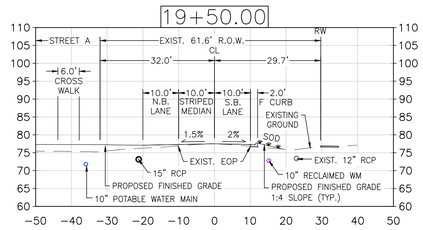

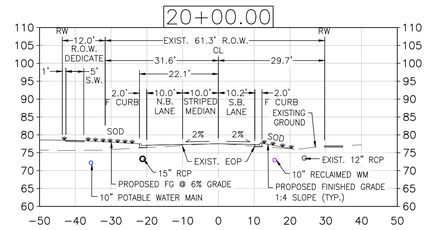

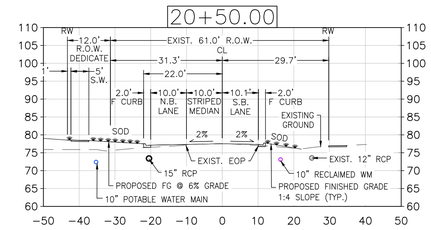

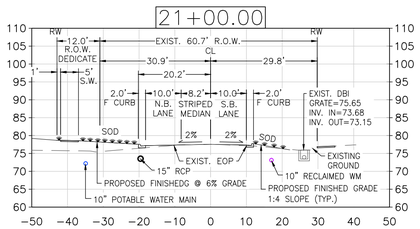

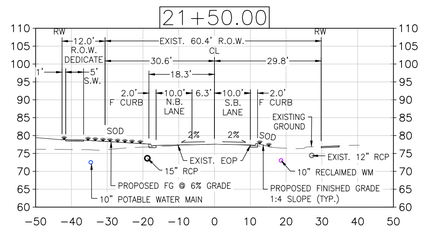

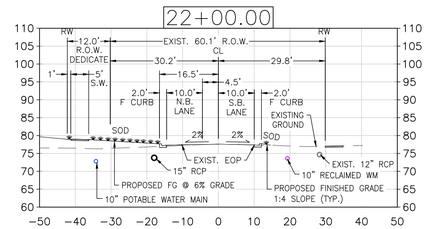

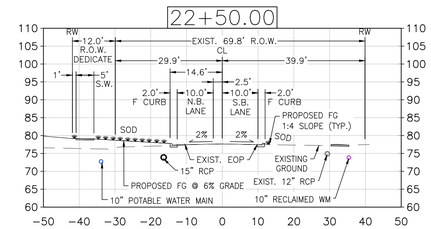

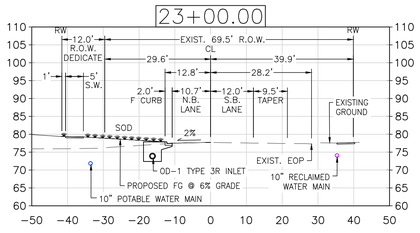

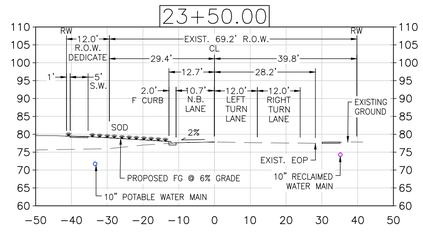

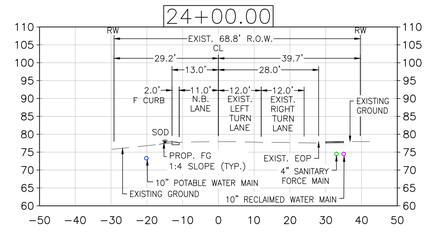

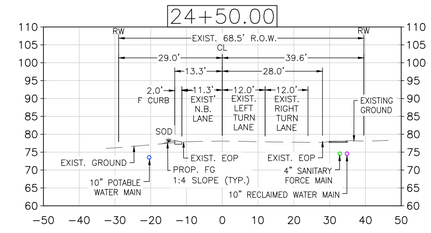

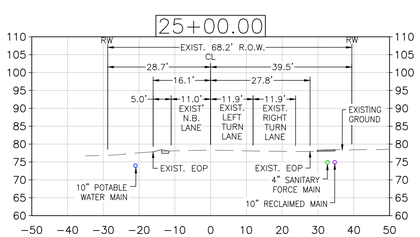

REVISION

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OLD HICKORY TREE ESTATES

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OLD HICKORY TREE ROAD CROSS SECTIONS

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
October 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
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SCALE
1" = 50'

SHEET NUMBER
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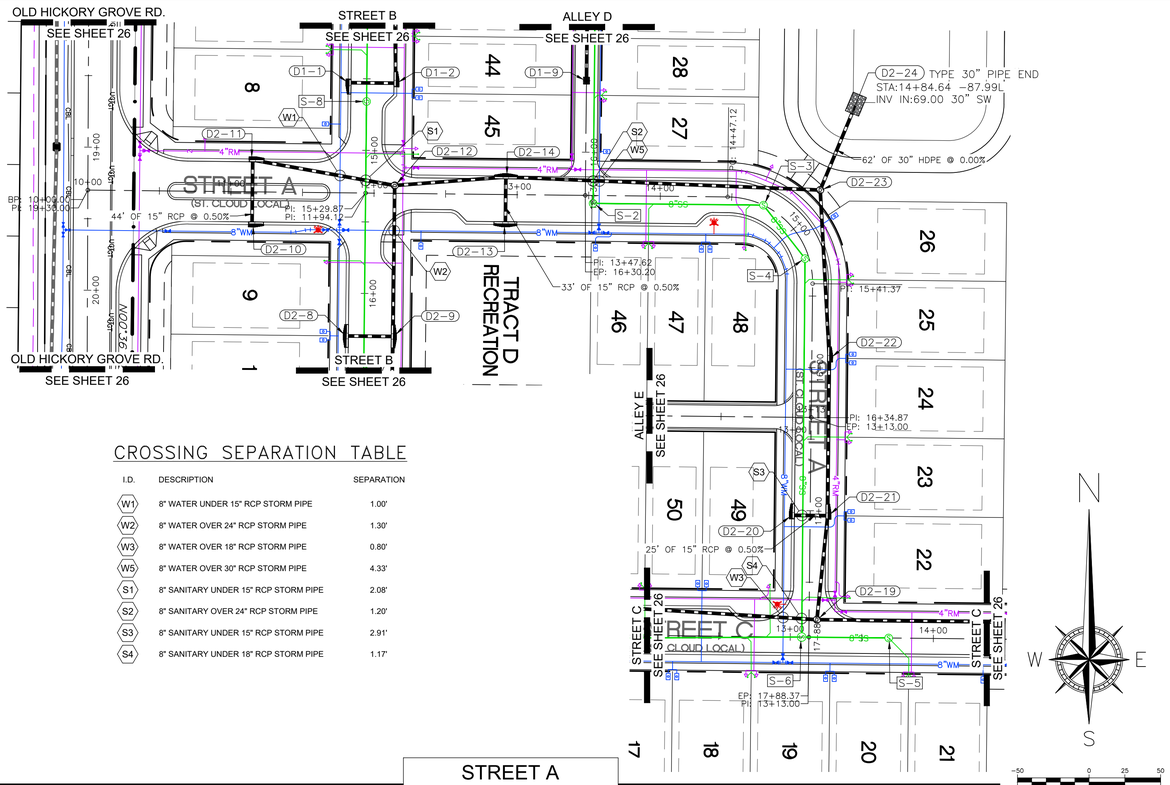
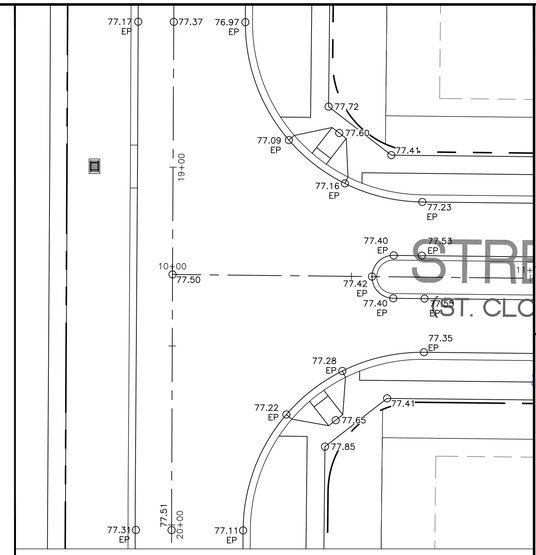


CROSSING SEPARATION TABLE

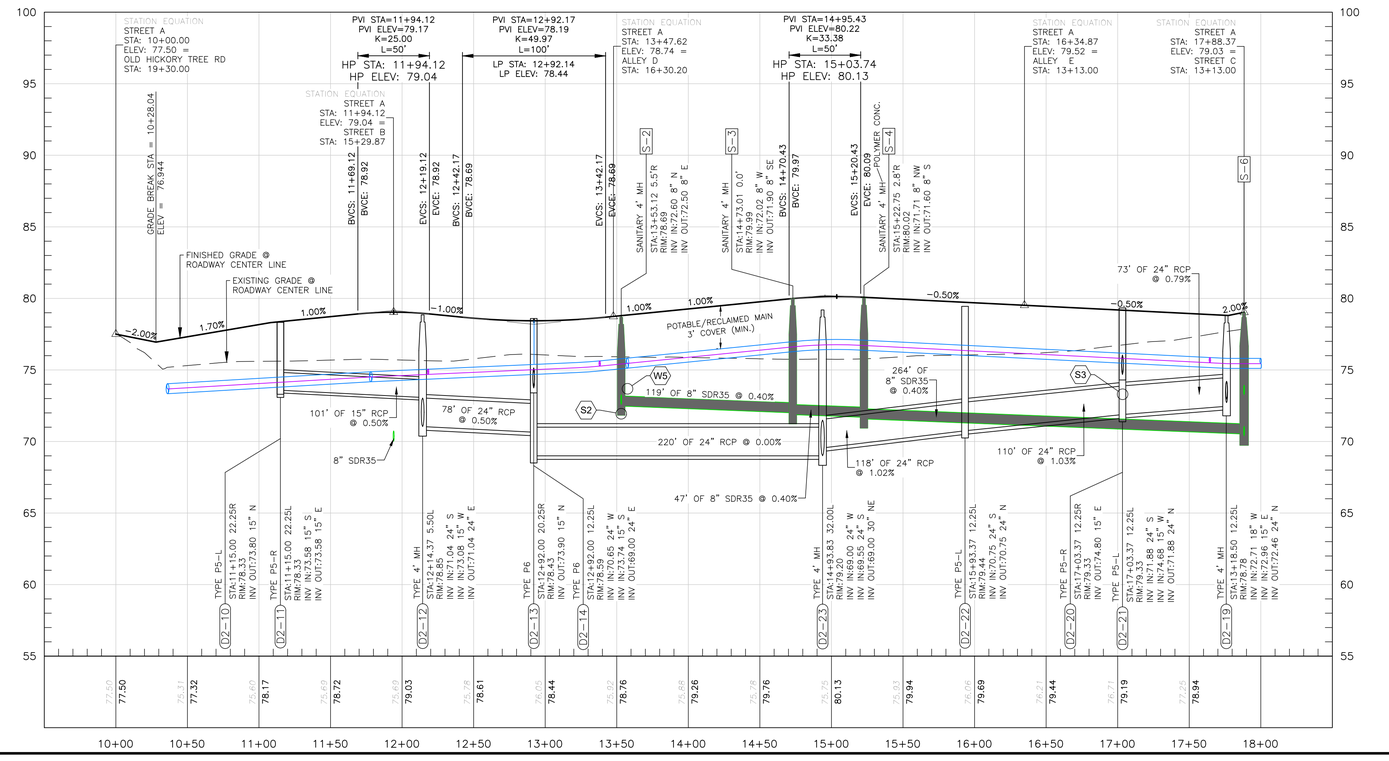
I.D.	DESCRIPTION	SEPARATION
W1	8" WATER UNDER 15" RCP STORM PIPE	1.00'
W2	8" WATER OVER 24" RCP STORM PIPE	1.30'
W3	8" WATER OVER 18" RCP STORM PIPE	0.80'
W5	8" WATER OVER 30" RCP STORM PIPE	4.33'
S1	8" SANITARY UNDER 15" RCP STORM PIPE	2.08'
S2	8" SANITARY OVER 24" RCP STORM PIPE	1.20'
S3	8" SANITARY UNDER 15" RCP STORM PIPE	2.91'
S4	8" SANITARY UNDER 18" RCP STORM PIPE	1.17'

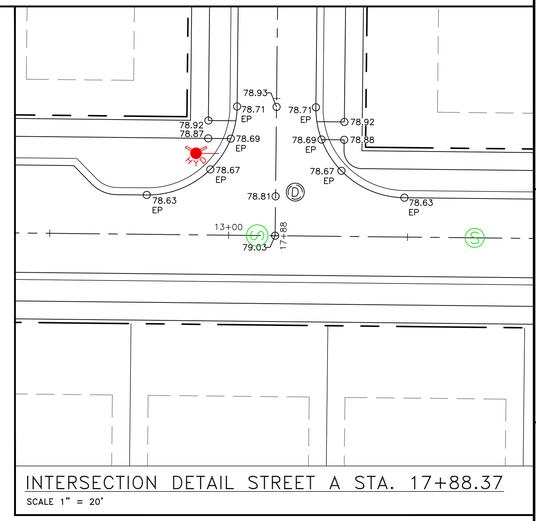


INTERSECTION DETAIL STREET A STA. 10+00

SCALE 1" = 20'

STREET A
STA 10+00 - 17+88.37





INTERSECTION DETAIL STREET A STA. 17+88.37

SCALE 1" = 20'

THOMAS L. KNIGHT
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PLAN & PROFILE
STREET A

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

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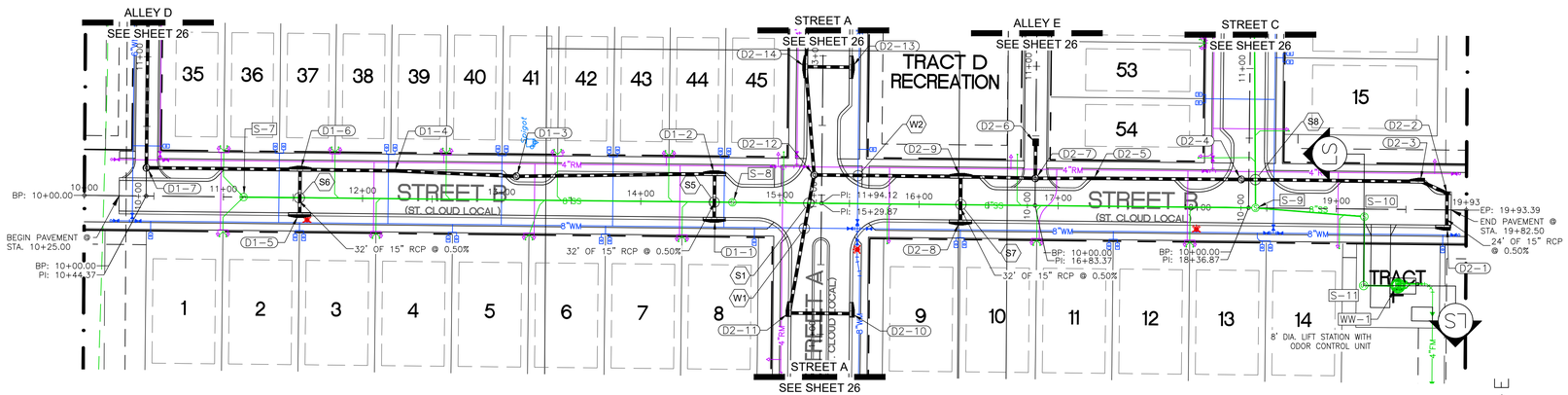
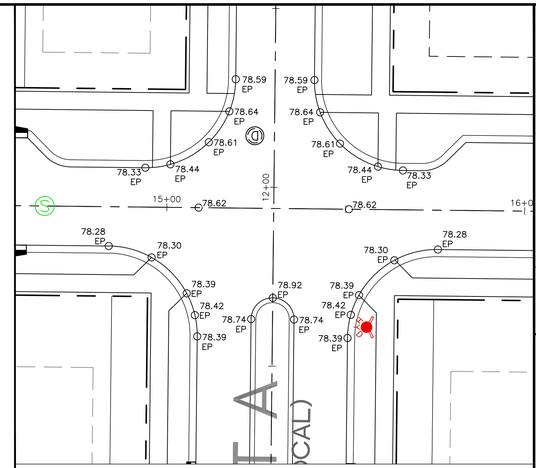
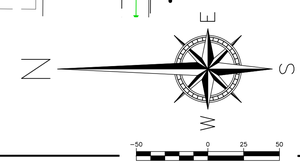




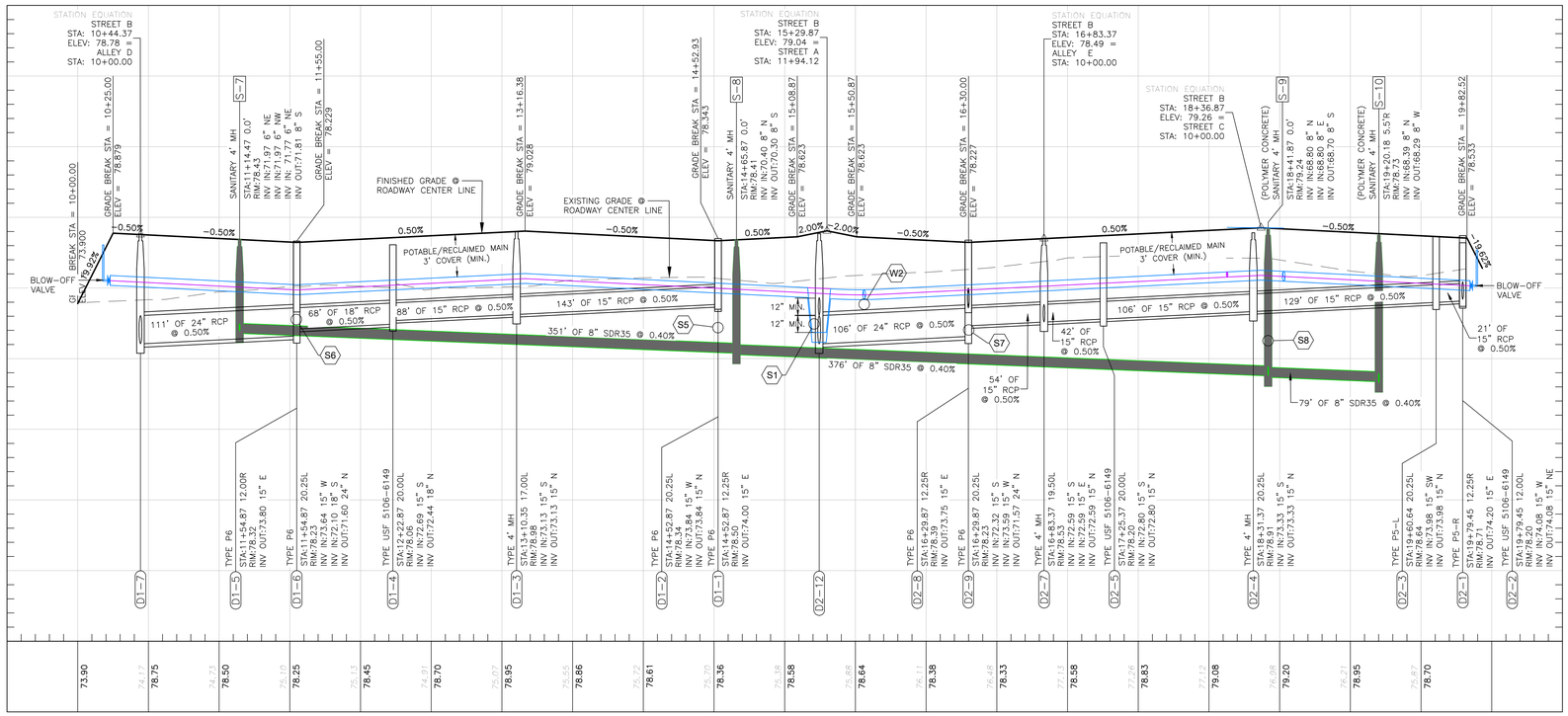
CROSSING SEPARATION TABLE

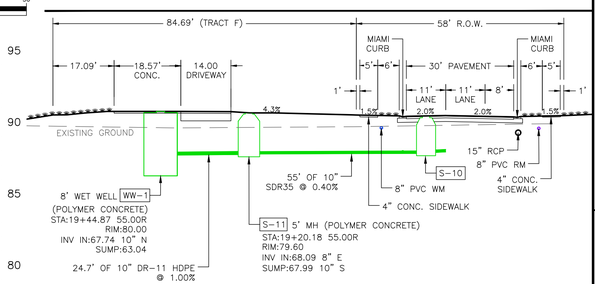
I.D.	DESCRIPTION	SEPARATION
W1	8" WATER UNDER 15" RCP STORM PIPE	1.00'
W2	8" WATER OVER 24" RCP STORM PIPE	1.30'
S1	8" SANITARY UNDER 15" RCP STORM PIPE	2.08'
S5	8" SANITARY UNDER 15" RCP STORM PIPE	2.50'
S6	8" SANITARY UNDER 15" RCP STORM PIPE	1.10'
S7	8" SANITARY UNDER 15" RCP STORM PIPE	3.06'
S8	8" SANITARY UNDER 15" RCP STORM PIPE	3.47'

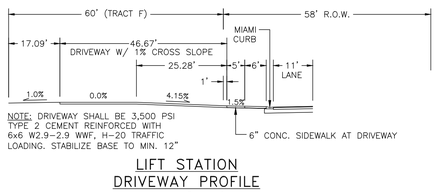


1 inch = 50 ft.

STREET B
STA 10+00 - 19+93.39







THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

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Signature must be verified on any electronic copies.

REVISION	DATE
Revised per St. Cloud comments dated Sep. 5, 2025	Oct. 2025

Knight Engineering
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 28S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
DEVELOPER: OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

PLAN & PROFILE STREET B

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
October 2025

DRAWN BY
TLK

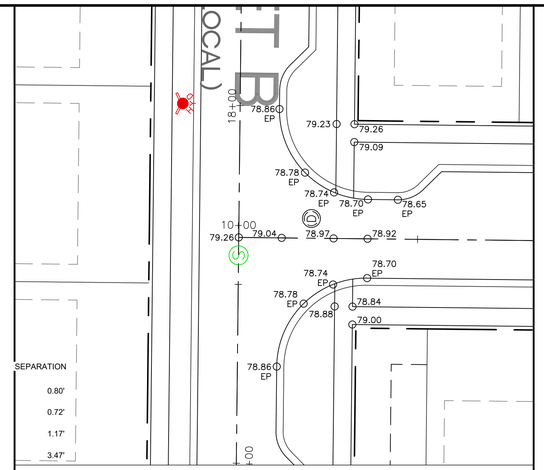
PROJECT NUMBER
23-12

SCALE
1" = 50'

SHEET NUMBER
19

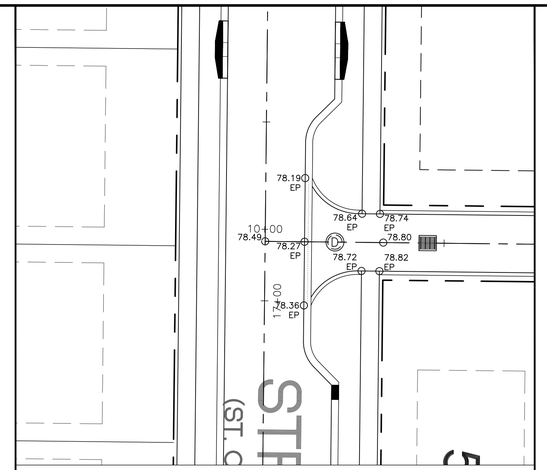
CROSSING SEPARATION TABLE

I.D.	DESCRIPTION	SEPARATION
W3	8" WATER OVER 18" RCP STORM PIPE	0.80'
W4	8" WATER OVER 18" RCP STORM PIPE	0.72'
S4	8" SANITARY UNDER 18" RCP STORM PIPE	1.17'
S8	8" SANITARY UNDER 15" RCP STORM PIPE	3.47'
S9	8" SANITARY UNDER 15" RCP STORM PIPE	3.26'



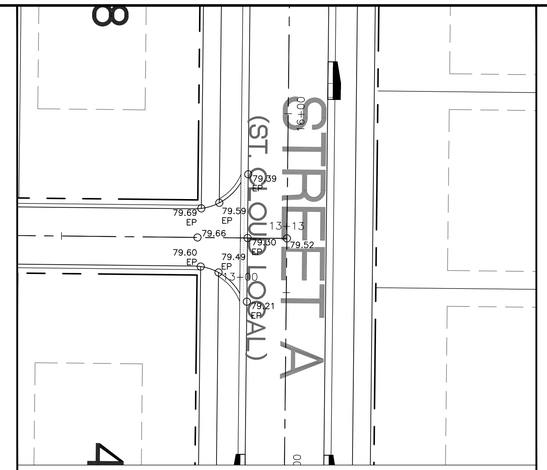
INTERSECTION DETAIL STREET C STA. 10+00

SCALE 1" = 20'



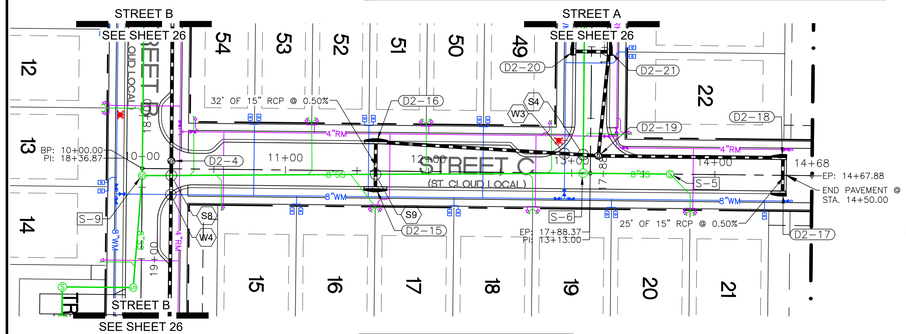
INTERSECTION DETAIL STREET E STA. 10+00

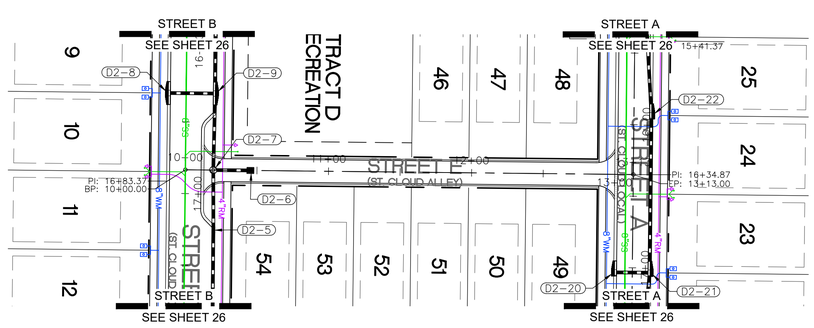
SCALE 1" = 20'



INTERSECTION DETAIL STREET E STA. 13+13

SCALE 1" = 20'





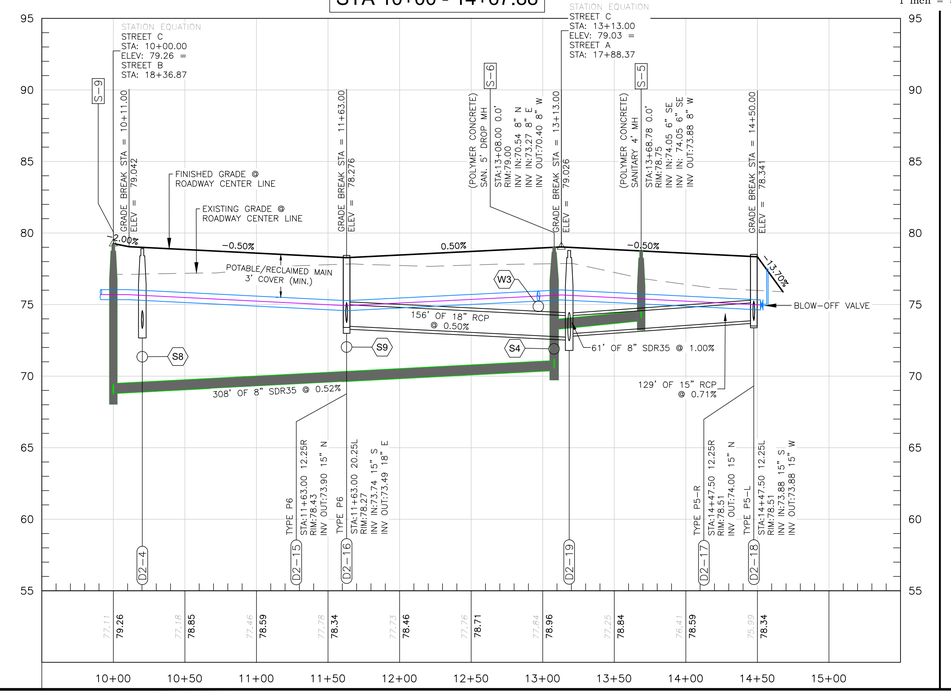
N

W E

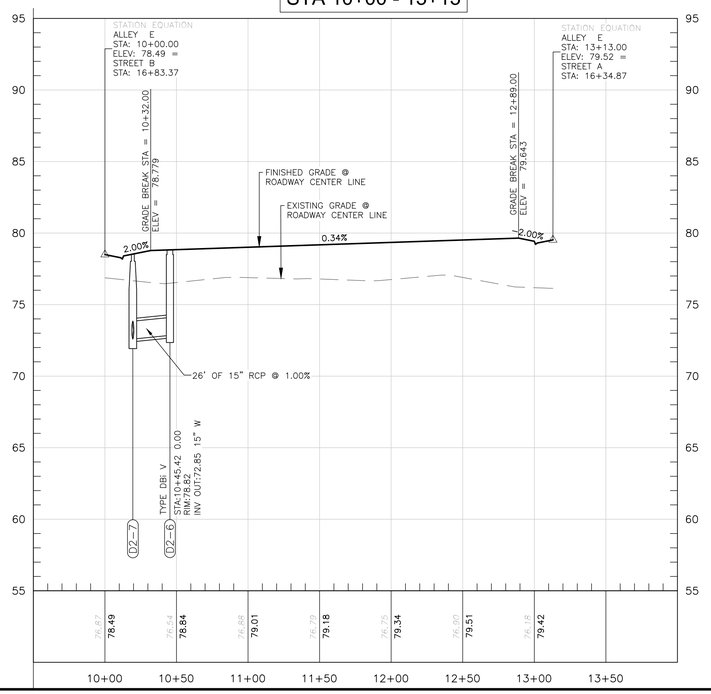
S

1 inch = 50 ft.

STREET C
STA 10+00 - 14+67.88



ALLEY E
STA 10+00 - 13+13



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Knight Services Engineering
Planning, Design, Permitting, Inspection
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Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
DEVELOPER: OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

PLAN & PROFILE STREET C & ALLEY E

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

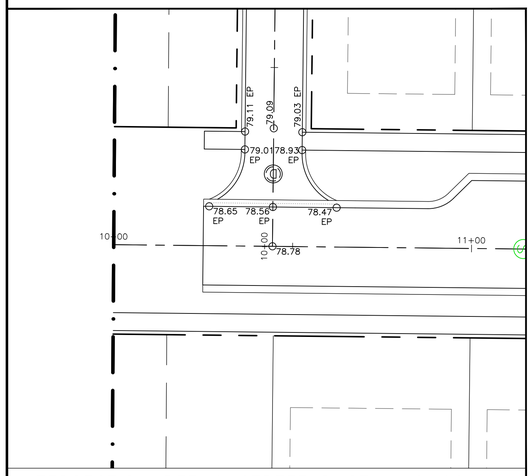
DATE
October 2025

DRAWN BY
TLK

PROJECT NUMBER
23-12

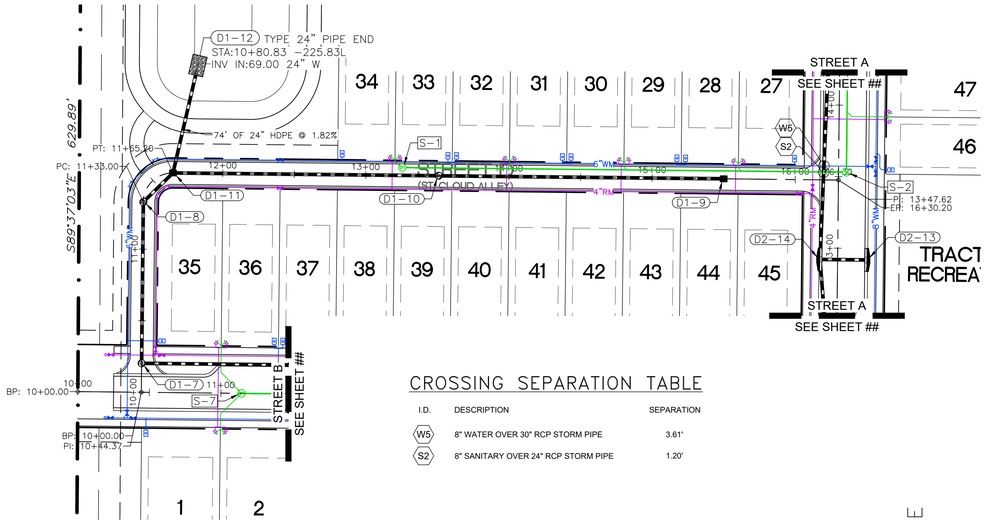
SCALE
1" = 50'

SHEET NUMBER
20



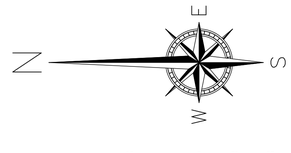
INTERSECTION DETAIL STREET D STA. 10+00

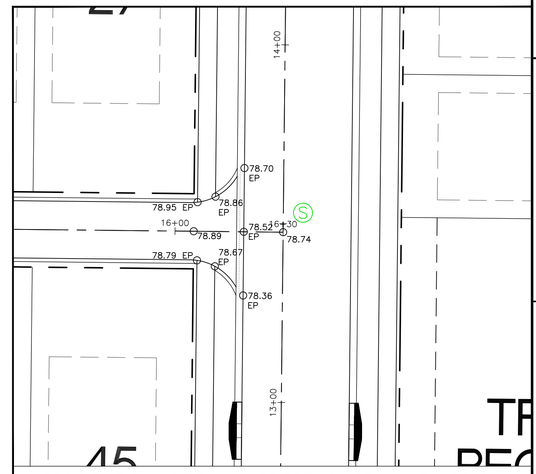
SCALE 1" = 20'



CROSSING SEPARATION TABLE

I.D.	DESCRIPTION	SEPARATION
W5	8" WATER OVER 30" RCP STORM PIPE	3.61'
S2	8" SANITARY OVER 24" RCP STORM PIPE	1.20'

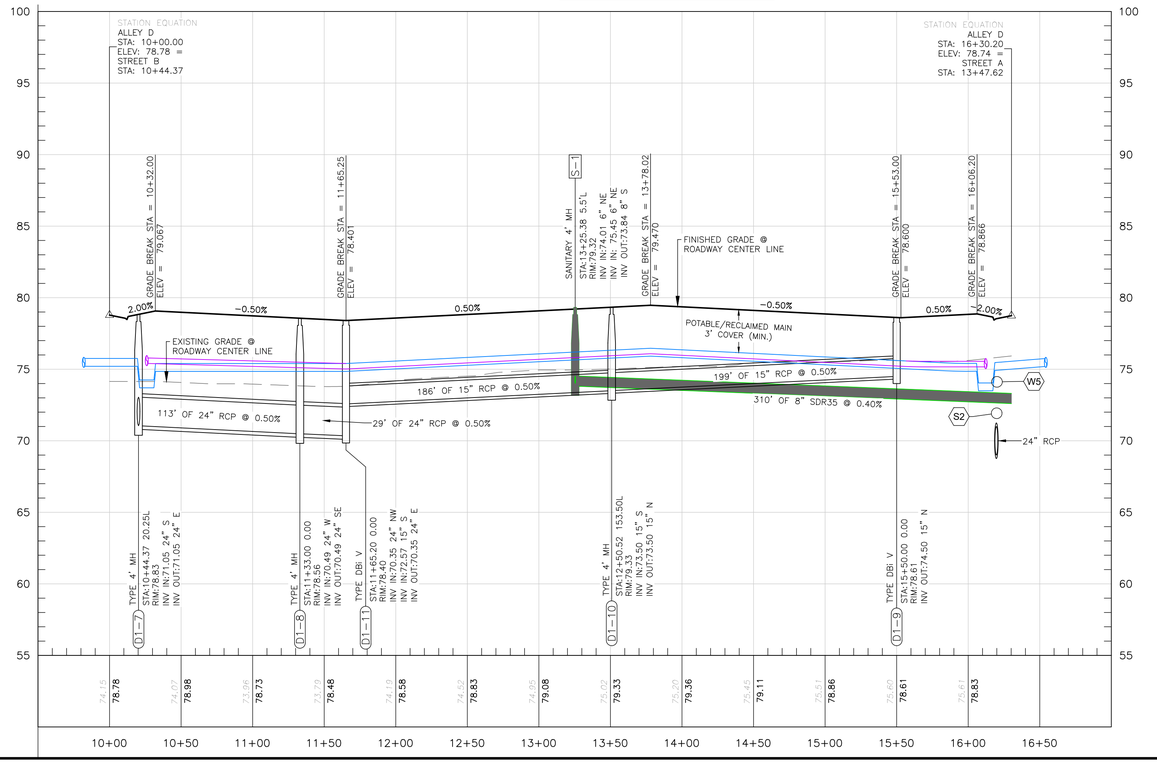




INTERSECTION DETAIL STREET D STA. 13+30.20

SCALE 1" = 20'

ALLEY D
STA 10+00 - 16+30.20



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OLD HICKORY TREE ESTATES

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DEVELOPER: OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

PLAN & PROFILE
ALLEY D

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE	October 2025
DRAWN BY	TLK
PROJECT NUMBER	23-12
SCALE	1" = 50'
SHEET NUMBER	21

CROSS–SECTION A–A

SCALE 1" = 10'

NOTE: ALL FENCING, BUILDINGS, HARDSCAPE, LANDSCAPE AND IRRIGATION DESIGNED BY OTHERS

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OLD HICKORY TREE ESTATES

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OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

SITE CROSS-SECTION A-A

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

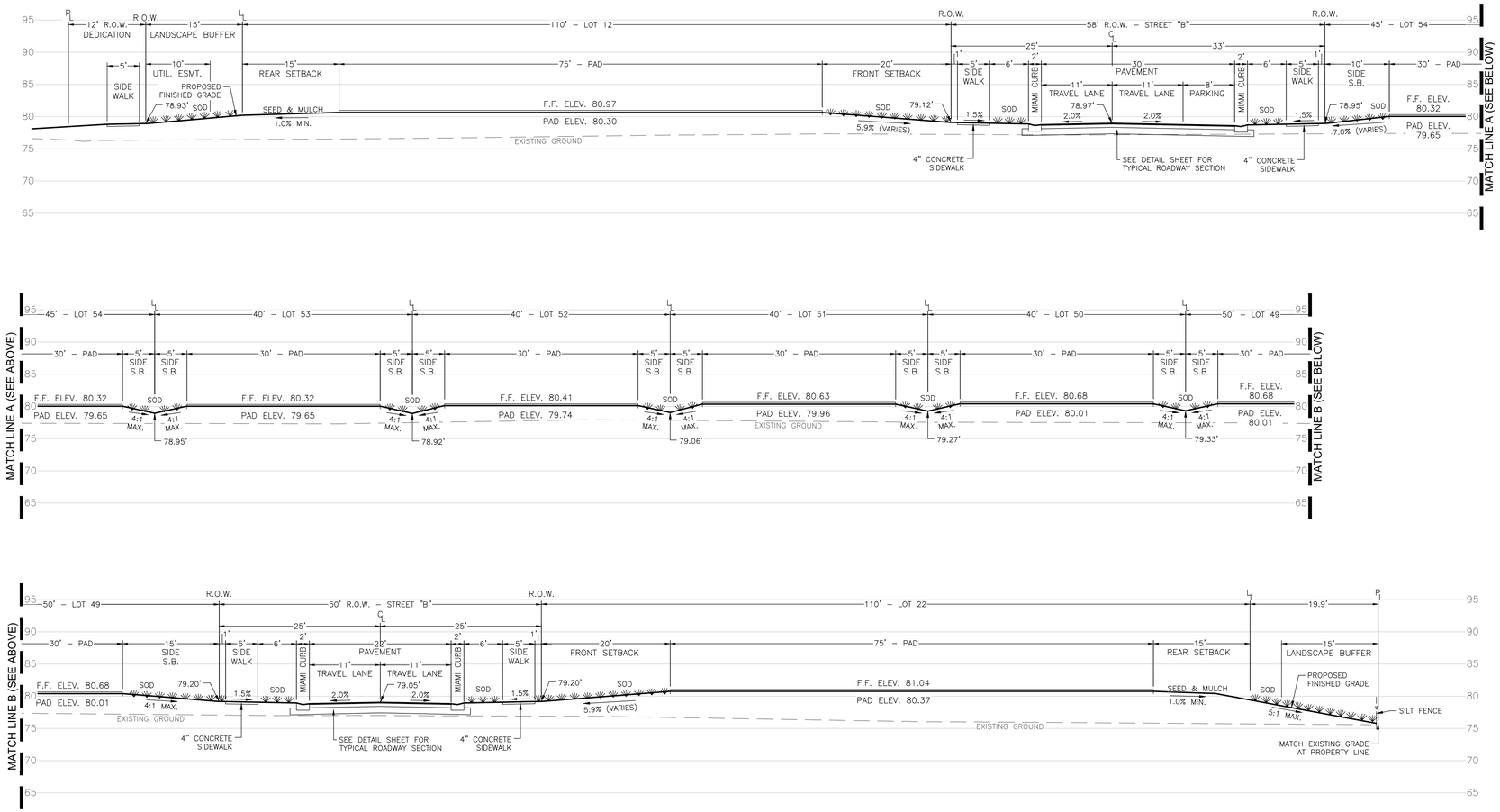
DATE
October 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
1" = 10'

SHEET NUMBER
22



CROSS–SECTION B–B

SCALE 1" = 10'

NOTE: ALL FENCING, BUILDINGS, HARDSCAPE, LANDSCAPE AND IRRIGATION DESIGNED BY OTHERS

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OLD HICKORY TREE ESTATES

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SITE CROSS-SECTION B-B

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FLORIDA REGISTRATION #47614

DATE
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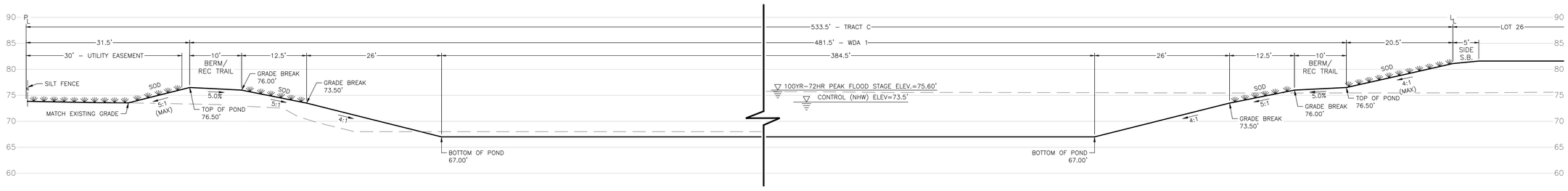
TLK/JMK

PROJECT NUMBER
23-12

SCALE
1" = 10'

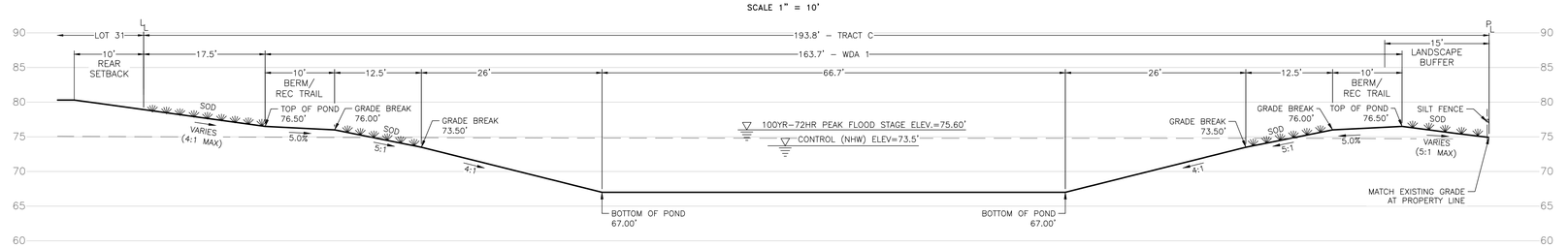
SHEET NUMBER
23

NOTE: ALL FENCING, BUILDINGS, HARDSCAPE, LANDSCAPE AND IRRIGATION DESIGNED BY OTHERS



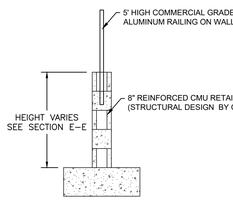
CROSS–SECTION C–C

SCALE 1" = 10'



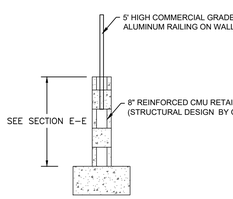
CROSS–SECTION D–D

SCALE 1" = 10'



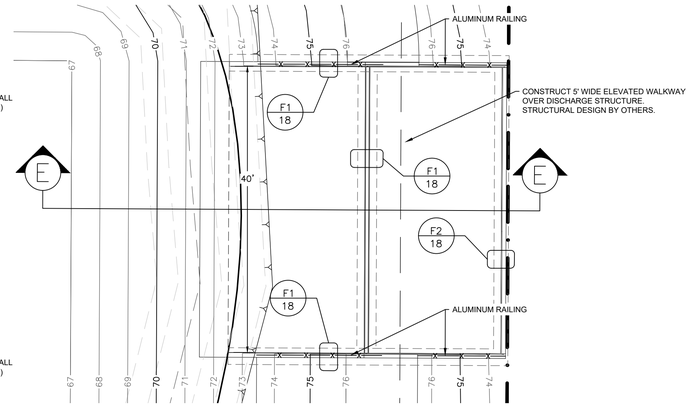
DETAIL F1

NOT TO SCALE



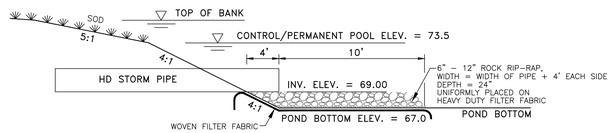
DETAIL F2

NOT TO SCALE



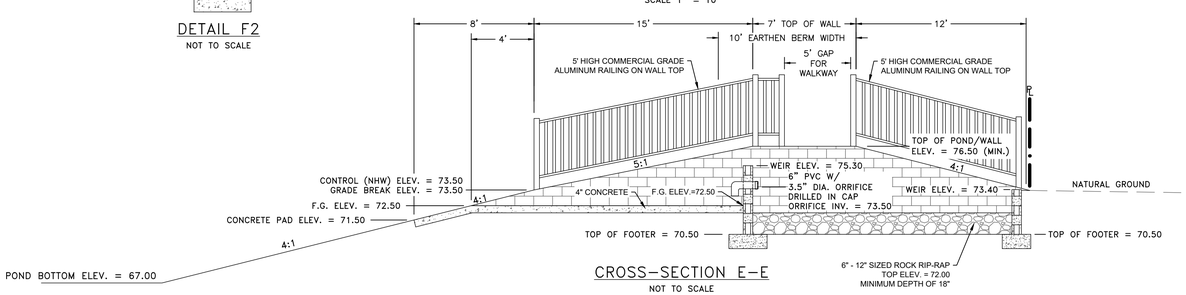
OVERFLOW WEIR DETAIL

SCALE 1" = 10'



SUBMERGED PIPE END DETAIL

N.T.S



CROSS–SECTION E–E

NOT TO SCALE

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OLD HICKORY TREE ESTATES

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OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

SITE CROSS-SECTIONS C-C, D-D, AND E-E

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

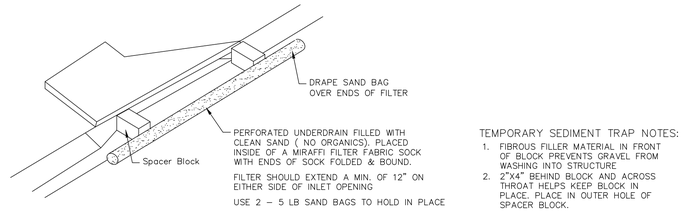
DATE
October 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
NOTED

SHEET NUMBER
24



TEMPORARY SEDIMENT TRAP NOTES:

1. FIBROUS FILLER MATERIAL IN FRONT OF BLOCK PREVENTS GRAVEL FROM WASHING INTO STRUCTURE
2. 2"X4" BEHIND BLOCK AND ACROSS THROAT HELPS KEEP BLOCK IN PLACE. PLACE IN OUTER HOLE OF SPACER BLOCK.

TEMPORARY SEDIMENT TRAP AT CURB INLET
NOT TO SCALE

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GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE TO FURNISH ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN CONFORMANCE WITH THE CITY OF ST. CLOUD SPECIFICATIONS AND ANY OTHER AGENCIES' SPECIFICATIONS AND REQUIREMENTS. THEY SHALL OBTAIN A COPY OF THE SOIL REPORT REFERENCED HEREIN AND VISIT THE SITE PRIOR TO BIDDING TO DETERMINE EXISTING CONDITIONS. THEY SHALL CLEAR AND GRUB ALL RIGHT-OF-WAYS, TRACTS AND APPROPRIATE EASEMENTS UNLESS OTHERWISE INDICATED, REMOVING TREES, STUMPS, ROOTS, MUCK, AND ALL OTHER DELETERIOUS MATERIAL.
2. THE EXACT LOCATIONS OF EXISTING UTILITIES ARE UNKNOWN. THE CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO BIDDING BY NOTIFYING THE UTILITY COMPANY TO LOCATE THEIR UTILITIES OR BY FIELD VERIFICATION. THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR ANY DAMAGED UTILITY RESULTING FROM THE CONTRACTOR'S CONSTRUCTION AT THE CONTRACTOR'S OWN EXPENSE.
3. THE REQUIREMENTS OF THE CITY OF ST. CLOUD STANDARD SPECIFICATIONS AND STANDARD DETAILS SHALL GOVERN ALL WORK. WHERE A CONFLICT EXISTS IN THE REQUIREMENTS OF A REFERENCED MATERIAL OR INSTALLATION STANDARD, THE REQUIREMENTS OF CITY OF ST. CLOUD SHALL PREVAIL. WHERE THE REQUIREMENTS OF A STATE OR LOCAL AGENCY HAVING JURISDICTION ARE MORE STRINGENT, THOSE REQUIREMENTS SHALL PREVAIL.
4. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE, AT ALL TIMES, ONE COPY OF THE CONTRACT DOCUMENTS INCLUDING STAMPED APPROVED PLANS, SPECIFICATIONS, AND ANY SPECIAL PROVISIONS, AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.
5. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER OF RECORD.
6. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL REQUIRED CONSTRUCTION PERMITS AND BONDS PRIOR TO CONSTRUCTION.
7. THE CONTRACTOR SHALL CONTACT ALL CONCERNED UTILITIES AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION OPERATIONS.
8. ALL COPIES OF REQUIRED TEST RESULTS ARE TO BE SENT TO THE CITY OF ST. CLOUD DIRECTLY FROM THE TESTING AGENCY.
9. ALL PAVING AND DRAINAGE TO BE CONSTRUCTED PER APPROVED PLANS PRIOR TO RECEIVING A CERTIFICATE OF OCCUPANCY.
10. ALL SIGNAGE TO BE PERMITTED BY SEPARATE INSTRUMENT.
11. THE CONTRACTOR MUST COMPLY WITH ALL TRENCH SAFETY STANDARDS.
12. THE SITE IS TO BE CLEARED AND GRUBBED.
13. ALL UNPAVED AREAS WITHIN THE CONSTRUCTION AREA AND RIGHT OF WAY SHALL BE SODDED WITH BAHIA GRASS AND/OR LANDSCAPED AS NOTED.
14. REFER TO PLANS FOR ALL EASEMENT REQUIREMENTS. EASEMENTS SHALL BE IN PLACE PRIOR TO THE CERTIFICATE OF COMPLETION BEING ISSUED.
15. THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR ANY DAMAGED RESULTING FROM THE CONTRACTOR'S CONSTRUCTION AT THE CONTRACTOR'S OWN EXPENSE.
16. SECTION 6 OF CITY OF ST. CLOUD LAND DEVELOPMENT CODE WILL BE UTILIZED IN CONJUNCTION WITH THESE DETAILS IN THE EVENT THAT THERE ARE CONFLICTING TERMS IN THE STANDARD DETAILS

AS-BUILT NOTES

THE CONTRACTOR SHALL SUBMIT A CERTIFIED SET OF AS-BUILT DRAWINGS TO THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING INFORMATION ON THE APPROVED PLANS CONCURRENTLY WITH CONSTRUCTION PROGRESS. RECORD DRAWINGS SUBMITTED TO THE ENGINEER AS PART OF THE PROJECT ACCEPTANCE SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:

A). DRAWINGS SHALL BE LEGIBLY MARKED TO RECORD ACTUAL CONSTRUCTION.

B). DRAWINGS SHALL SHOW ACTUAL LOCATION OF ALL UNDERGROUND AND ABOVE GROUND STORM DRAINAGE, WATER AND WASTEWATER PIPING AND RELATED APPURTENANCES. ALL CHANGES TO PIPING LOCATION INCLUDING HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES AND APPURTENANCES SHALL BE CLEARLY SHOWN AND REFERENCED TO PERMANENT SURFACE IMPROVEMENTS. DRAWINGS SHALL ALSO SHOW ACTUAL INSTALLED PIPE MATERIAL, CLASS, ETC.

C). DRAWINGS SHALL CLEARLY SHOW ALL FIELD CHANGES OF DIMENSION AND DETAIL INCLUDING CHANGES MADE BY FIELD ORDER OR BY CHANGE ORDER. DRAWINGS SHALL CLEARLY SHOW ALL DETAILS NOT ON THE ORIGINAL CONTRACT DRAWINGS, BUT CONSTRUCTED IN THE FIELD. ALL EQUIPMENT AND PIPING RELOCATION SHALL BE CLEARLY SHOWN.

D). LOCATION OF ALL INLETS, MANHOLES, HYDRANTS, VALVES AND VALVE BOXES SHALL BE SHOWN. ALL VALVES SHALL BE REFERENCED FROM AT LEAST TWO AND PREFERABLY THREE PERMANENT POINTS.

E). DIMENSIONS BETWEEN ALL INLETS AND MANHOLES SHALL BE FIELD VERIFIED AND SHOWN. THE INVERTS AND GRADE ELEVATIONS OF ALL INLETS AND MANHOLES SHALL BE SHOWN.

F). EACH SHEET OF THE PLANS SHALL BE SIGNED, SEALED AND DATED BY A REGISTERED SURVEYOR WITH A NOTE READING "THESE AS-BUILTS DRAWINGS ACCURATELY DEPICT THE ACTUAL IMPROVEMENTS AS CONSTRUCTED".

PAVING, GRADING & DRAINAGE NOTES

1. ALL ROADWAY AND PAVING CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST REVISION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, OSCEOLA COUNTY AND CITY OF ST. CLOUD STANDARDS.
2. THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED ON THE PLANS AND SHALL REGRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL A GRASS STAND IS WELL ESTABLISHED.
3. ALL PAVED AREAS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TYPICAL PAVING SECTIONS AS INDICATED.
4. WHERE NEW PAVEMENT MEETS THE EXISTING PAVEMENT, THE CONTRACTORS SHALL SAW-CUT THE EXISTING PAVEMENT FOR A SMOOTH AND STRAIGHT JOINT AND MATCH THE EXISTING PAVEMENT ELEVATIONS WITH THE PROPOSED PAVEMENT.
5. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL STORM DRAINAGE STRUCTURES TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL, PRIOR TO ORDERING MATERIALS.
6. THE CITY OF ST. CLOUD MAY BE RESPONSIBLE FOR THE MAINTENANCE OF THE STORMWATER SYSTEM IN ACCORDANCE WITH THE GUIDELINES SET FORTH BY THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT PERMIT. DOCUMENTS ARE ON FILE UNDER SFWMD PERMIT
7. ANY UNSUITABLE MATERIAL FOUND WITHIN LIMITS OF ROADWAY OR PAVEMENT SHALL BE REMOVED AND MAY BE USED FOR SHOULDER OR BEHIND CURB PLACEMENT.
8. ALL RUBBLE, CONCRETE SLABS, PAVEMENT, FOOTING MUCK, ORGANIC FINE SAND WITH ROOTS AND OTHER UNDESIRABLE MATERIALS SHALL BE REMOVED FROM THE SITE. THE UNDESIRABLE MATERIALS RESULTING FROM THE CLEARING OPERATION SHALL BE DISPOSED OF IN A PROPER MANNER BEYOND THE LIMITS OF THE CLEARED SITE.
9. ALL AREAS TO BE FILLED SHALL BE DONE WITH CLEAN, SUITABLE MATERIAL COMPRISED OF NON-PLASTIC SAND WITH LESS THAN ABOUT 12% FINES CONTENT. AND NOT CONTAINING ANY SIGNIFICANT AMOUNT OF ORGANIC SUBSTANCES (LESS THAN 3% BY WEIGHT) OR OTHER DELETERIOUS MATERIALS. FILL SHALL BE COMPACTED TO 98% DENSITY AS DETERMINED BY AASHTO T-180 AND 95% FOR AREAS BELOW ROAD SUBGRADE AS DETERMINED BY ASTM D-1557. FILL SHALL BE COMPACTED IN 12" MAX. LIFTS TO 98% OR 95% MAX. DENSITY.
10. UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL SOD ALL RETENTION AREAS AND ALL SIDE SLOPES AND OTHER DISTURBED AREAS ADJACENT TO DRAINAGE CONVEYANCE AREAS.

EROSION CONTROL
WATER QUALITY MANAGEMENT

1. THE CONTRACTOR MUST SELECT, IMPLEMENT, AND OPERATE ALL EROSION AND SEDIMENT CONTROL MEASURES REQUIRED TO RETAIN SEDIMENT ON-SITE AND TO PREVENT VIOLATIONS OF WATER QUALITY STANDARD AS SPECIFIED IN CHAPTERS 17-301, 17-302, 17-4, F.A.C. THE CONTRACTOR IS ENCOURAGED TO USE APPROPRIATE BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROLS AS DESCRIBED IN THE FLORIDA LAND DEVELOPMENT MANUAL: A GUIDE TO SOUND LAND AND WATER MANAGEMENT (DER, 1988).
2. THE CONTRACTOR SHALL CONTROL TURBID RUNOFF FROM THE PROJECT BY ROUGH EXCAVATING THE PROPOSED RETENTION AREAS IMMEDIATELY FOLLOWING CLEARING AND GRUBBING OPERATIONS. ALL DEWATERING DISCHARGE SHALL BE DIRECTED TO THESE AREA(S) FOR SETTLING PRIOR TO DISCHARGE OFF-SITE.
3. THE CONTRACTOR SHALL INSTALL WATER QUALITY CONTROL DEVICES ALONG THE SITE PERIMETER, AS DESIGNATED ON THESE PLANS. THE CONTRACTOR SHALL RECEIVE THE ENGINEER'S APPROVAL OF THE INSTALLATION PRIOR TO ANY OTHER SITE CONSTRUCTION.
4. ALL EROSION CONTROL/WATER QUALITY DEVICES SHALL BE IN ACCORDANCE WITH INDEXES 102 AND 103 OF THE LATEST EDITION OF THE FDOT "ROADWAY AND TRAFFIC DESIGN STANDARDS" SILT FENCES, HAY BALES, AND/OR TURBIDITY BARRIERS SHALL BE INSTALLED AT ALL OFF-SITE DISCHARGE POINTS. ALL EROSION CONTROL/WATER QUALITY DEVICES SHALL BE LEFT IN PLACE UNTIL THE DISTURBED AREAS ARE COMPLETELY STABILIZED AND/OR VEGETATED.
5. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SOIL MOISTURE TO PREVENT WIND GENERATED SOIL EROSION. ALL SURFACES DISTURBED FOR 30 OR MORE DAYS SHALL BE VEGETATED WITH A TEMPORARY OR PERMANENT COVER.

PAVER DRIVEWAY DETAIL
NTS

NOTES:
1. EXPANSION MATERIAL SHALL BE RECESSED 1/4" BELOW FINISHED CONCRETE W/ TOOLED JOINT RADIUS (#40 PRESSURE TREATED 1"x6" BOARD OR APROVED ALTERNATE MATERIAL.)
2. MIN. AND MAX. WIDTHS ARE FOR GARAGE SETBACKS OF 50' OR LESS. FOR SETBACKS GREATER THAN 50', USE 10' MIN. / 20' MAX
3. WIRE MESH SHALL HAVE 3" CLEARANCE FROM FORM BOARDS AND EDGE OF PAVEMENT.
4. FLARE IN RIGHT OF WAY SHALL NOT EXTEND BEYOND PROJECTED SIDE LOT LINE.
5. DRIVEWAY FINISHED GRADE SHALL BE 2" ABOVE GRADE OF LOT PRIOR TO SODDING. DRIVEWAY FINISHED GRADE SHALL BE 1" ABOVE GRADE OF LOT WHEN SEEDING/MULCHING.
6. SUBGRADE IS REQUIRED TO BE FIRM AND UNYEILDING MATERIAL WITH NO MUCK, PEAT, OR ANY ORGANNIC MATERIAL.
7. CITY OF ST. CLOUD WILL NOT MAINTAIN, REPAIR, OR REPLACE ANY BRICK OR CONCRETE PAVERS LOCATED WITHIN THE CITY RIGHT OF WAY. IF THE PAVERS ARE REMOVED BY THE CITY OF ST. CLOUD PERSONNEL, THE PROPERTY OWNER IS RESPONSIBLE FOR REPLACING THE PAVERS. A RIGHT OF WAY PERMIT MUST BE APPLIED FOR AND APPROVED PRIOR TO WORKING WITHIN THE RIGHT OF WAY.
8. CHANGES TO THIS STANDARD DETAIL MUST BE APPROVED PRIOR TO CONSTRUCTION.

CONSTRUCTION EROSION CONTROL

An erosion control plan and a detailed description of the measure to be taken during construction to control erosion within the limits of the project, and to prevent the deposition of sediment in off-site systems or receiving water bodies, shall be submitted with final engineering construction plans of the development. Included with this submittal shall be calculations supporting the effectiveness of the proposed plans.

A. Erosion Control Plan

The erosion control plan, details and calculations shall document the measures necessary to limit the transport of sediment outside the limits of the project(s) to the volume and amount of that existing prior to the commencement of construction. This pre-construction condition shall be satisfied for the total anticipated construction period. Provision must be made to preserve the integrity and capacity of check weir, sediment basins, slope drains and grading patterns, required to meet this provision throughout the project construction life.

1. Temporary Fence

The erosion Control Plan shall include provisions for a temporary 6' foot fence suitable for mitigating wind erosion and for providing visual relief during construction. Fences shall withstand normal wind loads. The developer may in lieu of temporary fencing:

i. Erect the required buffer yard screens as required in the landscaping plans if it meets the intent of the erosion control plan.
ii. Disturb less than ten (10) acres and provide adequate means to control materials from leaving the construction site. Logical phasing of the disturbed areas will need to be shown on the erosion control plan if the site is larger than 10 acres.

B. Stockpiling Material

No excavated materials shall be stockpiled in such a manner as to direct runoff directly off the project site or into any adjacent water body or stormwater collection facility.

C. Exposed Area Limitation

The surface area of open, raw, erodible soil, exposed by clearing and grubbing operations, or excavation and filling operations, shall not exceed ten acres. This requirement may be waived for large projects with an a[pproved dust control plan, which demonstrate that opening of additional areas will not significantly affect off-site deposit of sediments. This waiver will be by written authorization from the City Engineer. Any violations of the dust control plan will result in the immediate voiding of this waiver and could result in the construction activities being suspended until the site is brought back into compliance.

D. Inlet Protection

Inlets and catch basins shall be protected from sediment-laden storm runoff until the completion of all construction operations that may contribute to the inlet.

E. Temporary Seeding and Mulching

Areas opened by construction operations, that are not anticipated to be dressed and receive final grassing treatment within thirty days, shall be seeded with a quick-growing grass species which will provide an early cover during the season in which it is planted, and will not later compete with permanent grassing. The rate of seeding shall be 30 pounds per acre. Slopes steeper than 4:1 shall receive mulching of approximately 2 inches loose measure of mulch material cut into the soil of the seeded area to a depth of four inches.

F. Temporary Grassing

As required by the City of St. Cloud, the seed or seeded and mulched area shall be rolled and watered to assure optimum growing conditions, for the establishment of a good grass cover.

G. Temporary Regrassing

If, after fourteen days, the temporary grassed areas have not attained a minimum of 75% good grass cover, the area will be reworked and additional seed applied sufficiently to establish the desired vegetative cover. 75% of good stand of grass must be established within 30 days of the initial treatment or area shall be sodded.

H. Maintenance

All features of the project designed and constructed to prevent erosion and sediment, shall be maintained during the project construction life, so as to function as they were originally designed and constructed. The contractor is responsible for keeping any temporary grass in a mowed condition.

Permanent Erosion Control

The erosion control facilities of the project shall be designed to minimize the impact of off-site facilities. All stormwater discharge from the project limits shall be routed through detention basins to trap suspended sediments, and discharge facilities from these basins shall be provided with a skimming device to trap floatable debris.
A copy of the site's FDEP NPDES permit shall be provided to the Public Works Department prior to a Notice to Proceed being issued.

A. Permanent Seeding

All areas which have been disturbed by construction shall, at a minimum, be fertilized and seeded in accordance with City of St. Cloud Road Construction Specification.

B. Permanent Seeding and Mulching

In addition to the minimum requirements above, slopes from 6:1 to 3:1, inclusive, will be mulched with a uniform thickness of approximately two inches, loose measure, of mulch material incorporated into the soil by mixing to a depth of four inches.

C. Permanent Sodding

All retention/detention basins shall be solid sodded. All exposed areas, including public rights-of-way, with slopes steeper than 4:1 shall be solid sodded.

D. Strip Sodding

Strip sod, 1 foot wide or greater, shall be placed adjacent to all curbs, walkways and pavement. In areas with a sidewalk, the entire area between the sidewalk and the back of curb, and/or pavement, shall be sodded.

E. Regrassing

All grassed areas will be maintained to assure a good stand and sufficient ground cover to minimize erosion. If, after 60 days, an adequate ground cover has not been established, the area with be regressed.

F. Additional Fertilizer

Grassed areas, not accepted within 90 days of their completion, shall be re-fertilized at an application rate of 250 lb. per acre.

G. Maintenance

Prior to the project being accepted by the City, the contractor is responsible for mowing the grass to remain in compliance with the City Code.

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

CITY OF ST. CLOUD NOTES AND DETAILS

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

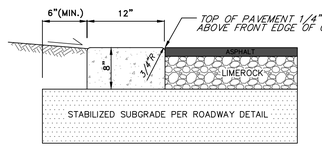
DATE
October 2025

DRAWN BY
TLK/JMK

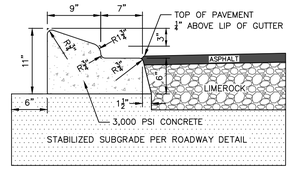
PROJECT NUMBER
23-12

SCALE
NONE

SHEET NUMBER
25



RIBBON CURB DETAIL
NOT TO SCALE



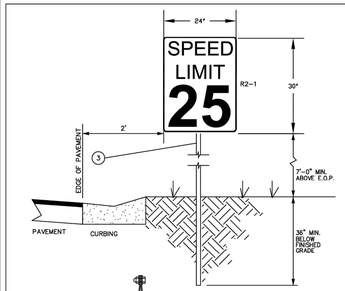
TYPE A CURB DETAIL
NOT TO SCALE

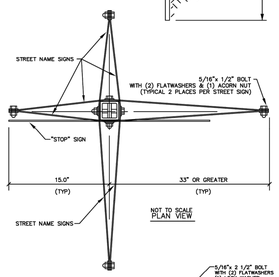
THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

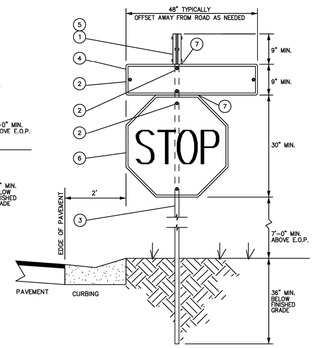
This item has been digitally signed and sealed by Thomas L. Knight, PE, on October 15, 2025.

Signature must be verified on any electronic copies.

REVISION	DATE
Revised per St. Cloud comments dated Sep. 5, 2025	Oct. 2025







FRONT ELEVATION
NOT TO SCALE

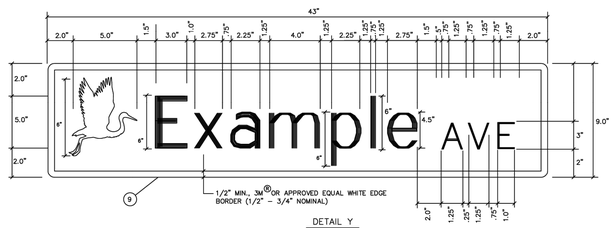
LEGEND:
(3) = SEE NOTE 3

NOTES FOR DUAL STREET SIGN WITH STOP SIGN:

1. STREET SIGN LENGTH TO BE 24" MINIMUM & 60" MAXIMUM. LONGER SIGNS BY SPECIAL PERMISSION FROM THE CITY ONLY. STREET NAME SIGNS MAY BE ON SEPARATE POST INSTALLATIONS WHEN REQUIRED USE 3M® OR APPROVED EQUAL BLUE FACE SHEETING MATERIAL WITH 1/2" WHITE BORDER ON EDGE OF FACE
2. STAINLESS STEEL FLATWASHER TO FACE EACH SIDE; ADDITIONAL LOCKWASHER TO GO BETWEEN ACORN NUT & FLATWASHER ON OPPOSITE SIDE FROM BOLT HEAD. USE ALL STAINLESS STEEL FASTENERS. ALL HOLES TO BE 5/16" DIA. MIN. TO 7/16" DIA. MAX. HOLES ON END OF STREET SIGN FOR REQUIRED PINNING OF (2) SIGNS TOGETHER
3. SIGN POST SHALL BE 2" (OUTSIDE) SQUARE TUBING, HOT DIP GALVANIZED, PRE-PUNCHED, 12 GA. STEEL POST SHALL BE 14' MIN. TOTAL LENGTH, ONE PIECE. "STOP" SIGN SHALL BE 7' (MIN.) ABOVE E.O.P. AT 2' CLEAR FROM E.O.P. TO EDGE OF STOP SIGN FACE. POST TO BE SET 3' MIN. IN GROUND, AND EARTH PACKED FIRMLY AROUND POST END WITH TAMPING ROD
4. LOWER STREET SIGN SHALL NOT BE MOUNTED PERPENDICULAR TO "STOP" SIGN FACE; THESE TWO SIGN SURFACES ARE TO OCCUPY THE SAME VERTICAL PLANE
5. TOP END OF SIGN POST SHALL MEET TOP EDGE OF TOP SIGN
6. "STOP" SIGN FACE SHALL BE 3M® OR APPROVED EQUAL, "HIGH INTENSITY."
7. ALL SIGNS SHALL BE ALUMINUM BLANKS, 0.063" THK. FOR STREET SIGNS, 0.080" THK. FOR STOP SIGNS, 3M® OR APPROVED EQUAL COVERED
8. SIGNING LAYOUT REQUIREMENTS:

	"STREET NAME" SHOWN
TYPICAL STROKE .75"	6.0" "C" SERIES, UPPER CASE
TYPICAL SINGLE GAP .75"	4.5" "C" SERIES, LOWER CASE
TYPICAL GAP & A HALF 1.25"	3.0" "C" SERIES, UPPER CASE
TYPICAL DOUBLE GAP 1.50"	

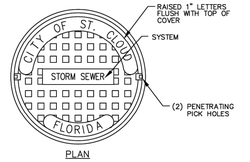
9. DETAIL "Y" SHOWS REQUIRED USE OF THE 5" SERIES "D" UPPER CASE LETTER WITH 4" LOWER CASE LETTERS FOLLOWING THE INITIAL LETTER OF THE STREET NAME
   PUBLIC ROAD SIGNS SHALL HAVE A BLUE BACKGROUND WITH WHITE LETTERING. PRIVATE ROAD SINGS SHALL HAVE A WHITE BACKGROUND WITH BLUE LETTERING.
10. SHEETING: ALL SHEET MATERIAL SHALL BE 3M® BRAND OR APPROVED EQUAL. INK SCREENED STREET NAME SIGNS SHALL BE 3M® OR APPROVED EQUAL INK.
11. INSPECTION: ALL ERECTED STREET NAME SIGN MATERIAL SHALL BE SUBJECT TO REJECTION.
12. SPEED LIMIT SIGNS INDICATING THE STATUTORY SPEED LIMITS SHALL BE INSTALLED AT THE ENTRANCES. ADDITIONAL SIGNS MAY BE REQUIRED BY THE CITY MANAGER OR DESIGNEE.



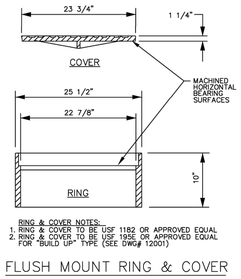
DETAIL Y
NOT TO SCALE

OFF STREET PARKING STALL REQUIREMENT TABLE

PARKING ANGLE	WIDTH OF STALL	DEPTH OF STALL	MINIMUM WIDTH OF TRAVELWAY	LENGTH OF CURB PER CAR
COMMERCIAL 0°	10'-0"	23'-0"	24'-0"	23'-0"
COMMERCIAL 45°	10'-0"	19'-10"	16'-0"	12'-9"
COMMERCIAL 60°	10'-0"	21'-0"	18'-0"	10'-5"
COMMERCIAL 90°	10'-0"	20'-0"	24'-0"	10'-0"
RESIDENTIAL	8'-0"	20'-0"	10'-0"	
ADA ACCESSIBLE PARKING	12'-0"	20'-0"	AS COMMERCIAL ABOVE	

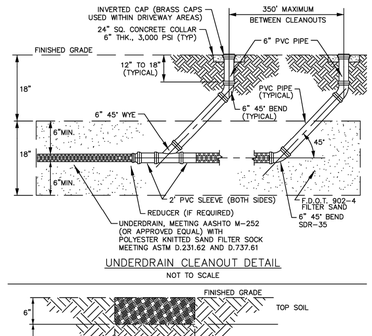


PLAN

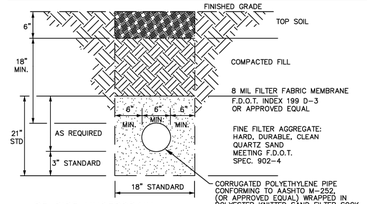


RING & COVER NOTES:
1. RING & COVER TO BE USF 1182 OR APPROVED EQUAL
2. RING & COVER TO BE USF 1956 OR APPROVED EQUAL FOR "BUILD UP" TYPE (SEE DWG# 12001)

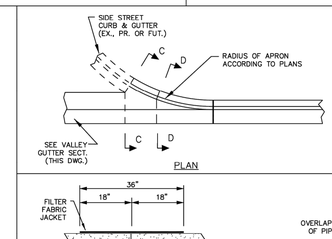
FLUSH MOUNT RING & COVER



UNDERDRAIN CLEANOUT DETAIL
NOT TO SCALE



PE PIPE UNDERDRAIN
NOT TO SCALE



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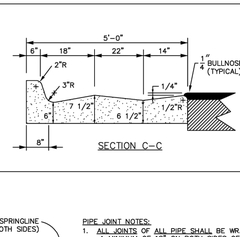
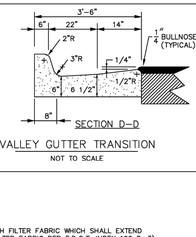
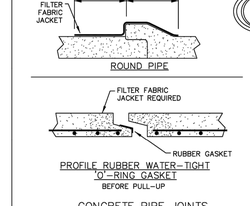


SECTION C-C



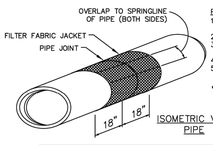
SECTION D-D

VALLEY GUTTER TRANSITION
NOT TO SCALE



PROFILE RUBBER WATER-TIGHT 'O'-RING GASKET
BEFORE PULL-UP

CONCRETE PIPE JOINTS



ISOMETRIC VIEW
PIPE

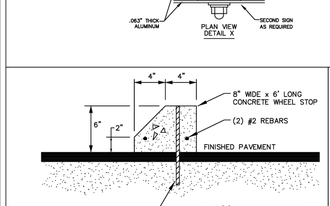
FILTER FABRIC JACKET FOR PIPE JOINTS

PIPE JOINT NOTES:
1. ALL JOINTS OF ALL PIPE SHALL BE WRAPPED WITH FILTER FABRIC WHICH SHALL EXTEND A MINIMUM OF 18" ON BOTH SIDES OF JOINT (FILTER FABRIC PER F.D.O.T. INDEX 199 D-3)
2. FILTER FABRIC SHALL OVERLAP ON TOP OF PIPE DOWN TO SPRING LINE OF PIPE ON BOTH SIDES
3. ALL STORM DRAINAGE PIPE SHALL BE A MINIMUM 15" DIAMETER PIPE OR ITS HYDRAULIC EQUIVALENT 12" X 18" E.R.C.P.
4. CONFLICT STRUCTURES SHALL BE APPROVED ON A CASE BY CASE BASIS
5. ALL STORM INLETS, CATCH BASINS & MANHOLES SHALL BE PRECAST CONCRETE SEE F.D.O.T. ROAD & TRAFFIC DESIGN STANDARDS (LATEST EDITION)

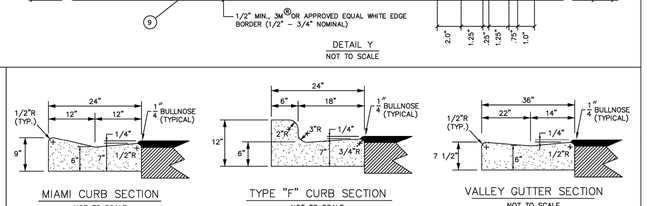
* (EXTERIOR WALL JOINTS SHALL BE WRAPPED WITH CON-WRAP, E-Z WRAP OR APPROVED EQUAL)

PIPE REQUIREMENTS:
1. REINFORCED CONCRETE PIPE (ASTM C 76) CLASS III OR STRONGER BASED ON "D" LOAD; OR FRCP (FIBER-MIX) CONCRETE PIPE; PER: ASTM C1450 AND F.D.O.T. SPEC. SECTION 941, OR LATEST EDITION.
2. PRE-STRESSED CONCRETE PIPE (AWWA C301) SHALL BE APPROVED ON A CASE BY CASE BASIS
3. ALTERNATIVE PIPE MATERIALS MAY BE USED FOR PRIVATELY MAINTAINED STORMWATER SYSTEMS.

GENERAL NOTES:
1. ALL PAVEMENT MARKINGS AND TRAFFIC CONTROLS SHALL COMPLY WITH THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (M.U.T.C.D.), LATEST EDITION AS PUBLISHED BY FEDERAL HIGHWAY ADMINISTRATION.
2. HANDICAP RAMPS SHALL COMPLY WITH THE "AMERICANS WITH DISABILITIES ACT" OF 1992
3. ALL PAVING AND DRAINAGE STRUCTURES (INCLUDING CURBING) SHALL COMPLY WITH F.D.O.T. "STANDARDS FOR ROAD AND BRIDGE CONSTRUCTION," LATEST EDITION.
4. RECORDINGS FROM CLOSED CIRCUIT TELEVISION INSPECTIONS CONDUCTED BY A CONTRACT TV INSPECTOR EMPLOYED BY THE DEVELOPER SHALL BE PROVIDED TO THE CITY ON A DVD AND INCLUDE A WRITTEN REPORT CORRESPONDING TO THE DVD RESULTS. A POST CLOSED CIRCUIT TELEVISION INSPECTION SHALL BE REQUIRED BY THE DEVELOPER PRIOR TO THE EXPIRATION OF THE MAINTENANCE BOND.



PARKING WHEEL STOP DETAIL
NOT TO SCALE

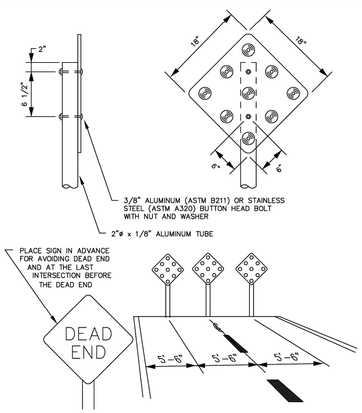


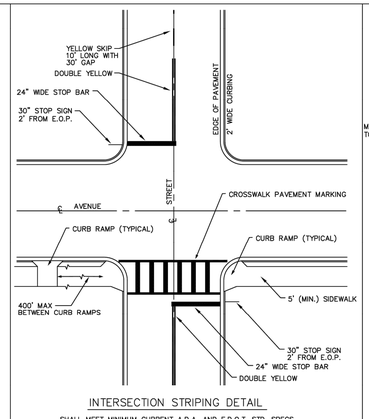
MIAMI CURB SECTION
NOT TO SCALE

TYPE "F" CURB SECTION
NOT TO SCALE

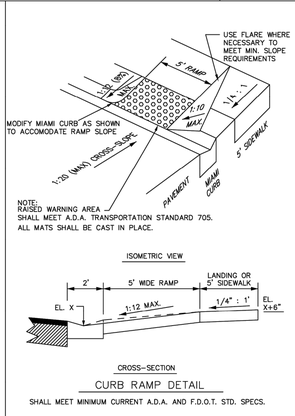
VALLEY GUTTER SECTION
NOT TO SCALE

CURB NOTES
1. ALL CONCRETE CURB SHALL BE CONTINUOUSLY CURED FOR A PERIOD OF NOT LESS THAN 72 HOURS. SEE F.D.O.T. ROAD & BRIDGE SPECIFICATIONS (LATEST EDITION) SEC. 520-8



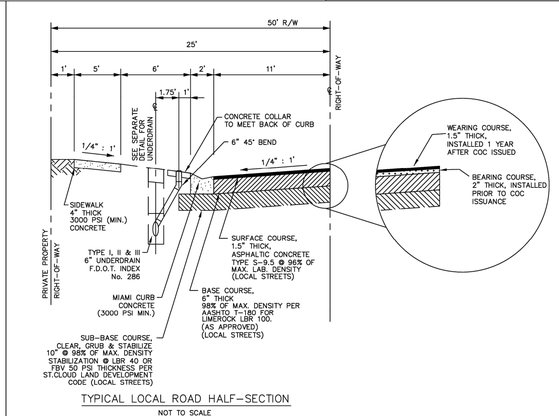


INTERSECTION STRIPING DETAIL
SHALL MEET MINIMUM CURRENT A.D.A. AND F.D.O.T. STD. SPECS.

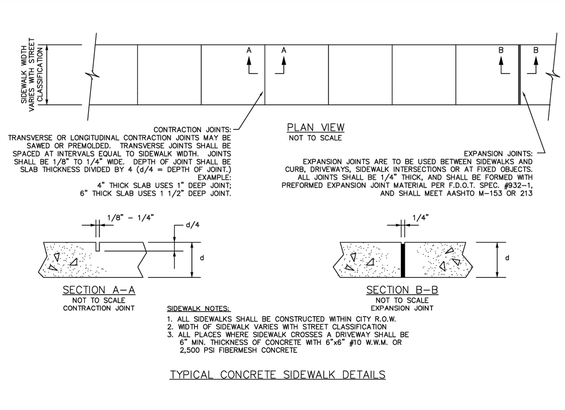


CROSS-SECTION

CURB RAMP DETAIL
SHALL MEET MINIMUM CURRENT A.D.A. AND F.D.O.T. STD. SPECS.



TYPICAL LOCAL ROAD HALF-SECTION
NOT TO SCALE



SIDEWALK NOTES:
1. ALL SIDEWALKS SHALL BE CONSTRUCTED WITHIN CITY R.O.W.
2. WIDTH OF SIDEWALK VARIES WITH STREET CLASSIFICATION
3. ALL PLACES WHERE SIDEWALK CROSSES A DRIVEWAY SHALL BE 6" MIN. THICKNESS OF CONCRETE WITH 6"x6" #10 W.W.M. OR 2,500 PSI FIBERMESH CONCRETE

TYPICAL CONCRETE SIDEWALK DETAILS

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

CITY OF ST. CLOUD NOTES AND DETAILS

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

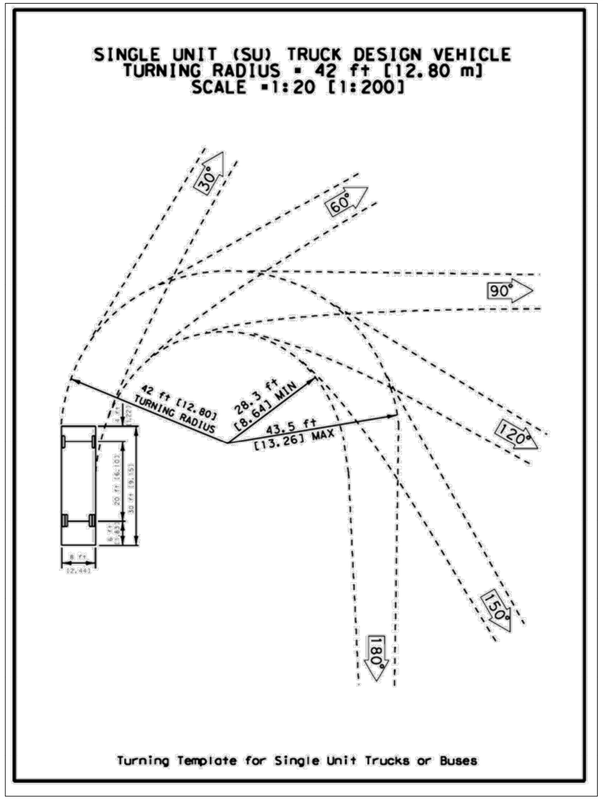
DATE
October 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
NONE

SHEET NUMBER
26

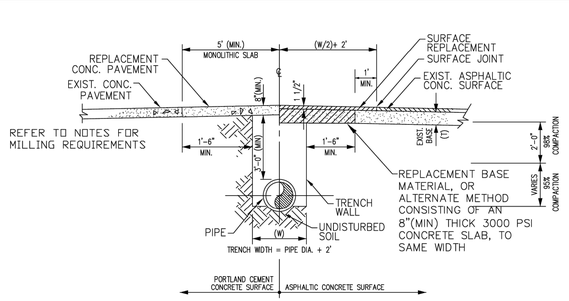


PARAMETERS:

1.	INSIDE CRAMP ANGLE	40 DEGREE
2.	AXLE TRACK	82.92 INCHES
3.	WHEEL OFFSET	5.3 INCHES
4.	TREAD WIDTH	17.5 INCHES
5.	CHASSIS OVERHANGE	78 INCHES
6.	ADDITIONAL BUMPER DEPTH	19 INCHES
7.	FRONT OVERHANG	136.1 INCHES
8.	WHEEL BASE	267.5 INCHES

CALCULATED TURN RADII:

1.	INSIDE TURN	25FT 5 INCHES
2.	CURB TO CURB	41 FEET 5 INCHES
3.	WALL TO WALL	48 FEET 3 INCHES



STANDARD ROADWAY OPEN CUT DETAIL

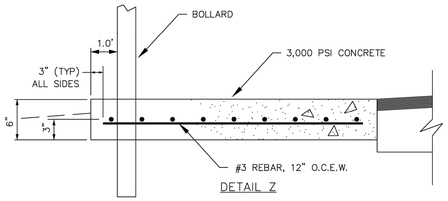
NTS

BEDDING AND TRENCHING NOTES:

1. TRENCH TO BE BACKFILLED WITH SUITABLE MATERIAL IN ONE (1) FOOT LIFTS AND COMPACTED TO 98% DENSITY (AASHTO-T-180)
2. FLOW-ABLE FILL CAN BE UTILIZED AS AN ALTERNATIVE. FLOW-ABLE FILL WILL BE 80 PSI WITH ASTM C-494, TYPE C ACCELERATOR TO OBTAIN A SETTING TIME OF 3-4 HOURS
3. FOLLOW THE LATEST EDITION OF FDOT STANDARDS FOR ROAD AND BRIDGE AND DESIGN STANDARDS
4. ALL EXCAVATIONS SHALL BE PERFORMED IN ACCORDANCE WITH O.S.H.A. TRENCH SAFETY REQUIREMENTS.
5. IF THE EXISTING PAVEMENT CONTAINS FC, THE MILLING DEPTH WILL BE INCREASED FOR THE FC THICKNESS.
6. OPEN CUTS IN ROADS NEWER THAN 5 YEARS, WILL REQUIRE THE CITY ENGINEERS APPROVAL. ALTERNATE REPAIR METHODS MAY APPLY.
7. MATCH EXISTING PAVEMENT MINIMUM OF 3" TYPE S ASPHALT.
8. MILL AND OVERLAY CONDITIONS SHALL BE PREPARED AS SPECIFIED WITHIN

25 TO 45 MPH ---- 20FT EACH SIDE
45 TO 55 MPH ---- 50FT EACH SIDE
55 & > -------- 100ft EACH SIDE

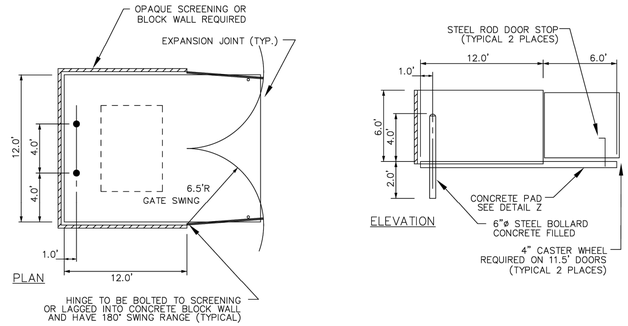
9. ALL STRIPPING, REFLECTORS OR OTHER MARKINGS OBLITERATED BY OVERLAYING SHALL BE RESTORED IN ACCORDANCE WITH F.D.O.T. STANDARDS PRIOR TO INITIAL ACCEPTANCE BY THE CITY OF ST. CLOUD



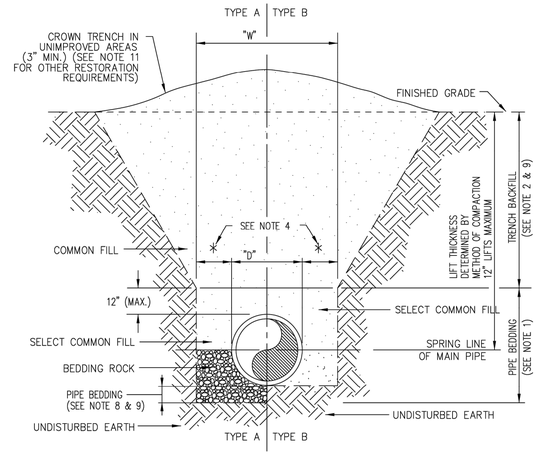
DETAIL Z

SINGLE DUMPSTER PAD DETAIL

NTS



DUMPSTER PAD NOTES:
1. FOR MULTIPLE DUMPSTERS ON A SINGLE PAD, SCREENING SHALL BE REQUIRED AROUND THE PERIMETER OF THE PAD.
2. DUMPSTER PADS WITH MULTIPLE DUMPSTER WILL BE APPROVED ON A CASE BY CASE BASIS.
2. DUMPSTER ENCLOSURES SHALL HAVE A MINIMUM INSIDE DIMENSION OF 12'X12' MEASURED FROM INTERIOR WALL TO INTERIOR WALL.

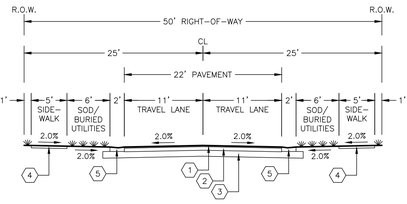


BEDDING AND TRENCHING DETAIL

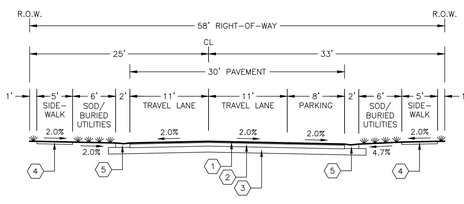
NTS

BEDDING & TRENCHING NOTES:

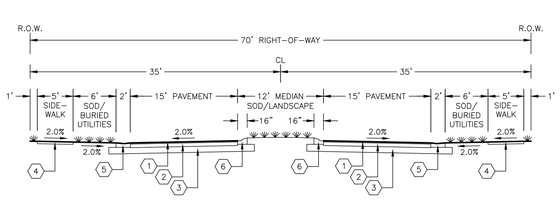
1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180. COMPACTION SHALL BE 98% WITHIN 2' OF FINISHED ELEVATION UNDER ALL ROADWAYS, AND TO 2 LF BEHIND CONCRETE CURBS OR THE EDGE OF PAVEMENT.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180. COMPACTION SHALL BE 98% WITHIN 2' OF FINISHED ELEVATION UNDER ALL ROADWAYS, AND TO 2 LF BEHIND CONCRETE CURBS OR THE EDGE OF PAVEMENT.
3. USE TYPE A BEDDING TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CITY.
4. * 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. ALL NECESSARY MEASURES SHALL BE TAKEN TO KEEP THE TRENCH AS DRY AS POSSIBLE DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. REFER TO LAND DEVELOPMENT CODE FOR SHEETING AND BRACING IN EXCAVATIONS. GRAVITY SEWERS SHALL UTILIZE TYPE A BEDDING, IF REQUIRED BY THE CITY.
8. GRAVITY SEWERS SHALL UTILIZE A TYPE A BEDDING, IF REQUIRED BY THE CITY. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER LESS THAN 15", AND 6" MINIMUM FOR PIPE DIAMETER 16" AND LARGER.
9. THE CITY ENGINEER MAY APPROVE ALTERNATE METHODS OF TRENCH BACKFILL COMPACTION ON A CASE BY CASE SITUATION.
10. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. THE CITY SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.
11. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN THE CITY OF ST. CLOUD RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.



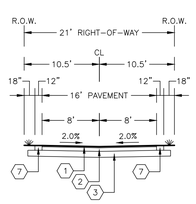
TYPICAL LOCAL ROADWAY SECTION
SCALE 1" = 10'



TYPICAL LOCAL ROADWAY W/PARKING ON ONE SIDE SECTION
SCALE 1" = 10'



TYPICAL ENTRANCE LOCAL ROADWAY SECTION
SCALE 1" = 10'



TYPICAL ALLEY SECTION
SCALE 1" = 10'

KEY

1. 1½" TYPE S-9.5 ASPHALTIC CONCRETE SURFACE COURSE @ 96% OF MAX. LAB. DENSITY
2. 6" LIMEROCK BASE COURSE @ 98% OF MAX. DENSITY PER AASHTO T-180, LBR 100
3. 10" CLEARED, GRUBBED AND STABILIZED BASE COURSE @ 98% OF MAX. DENSITY STABILIZATION, LBR 40 OR FBV 50 PSI THICKNESS (PER ST. CLOUD LDC) EXTENDED 12" BEYOND THE BACK OF CURB
4. 4" SIDEWALK, MIN. 3,000 PSI CONCRETE
5. MIAMI CURB, MIN. 3,000 PSI CONCRETE
6. FDOT TYPE A CURB, MIN. 3,000 PSI CONCRETE
7. RIBBON CURB, MIN. 3,000 PSI CONCRETE

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Thomas L. Knight, PE, on October 15, 2025.

Signature must be verified on any electronic copies.

REVISION	DATE
Revised per St. Cloud comments dated Sep. 5, 2025	Oct. 2025

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

CITY OF ST. CLOUD NOTES AND DETAILS

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
October 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
NONE

SHEET NUMBER
27

TOHO WATER AUTHORITY GENERAL CONSTRUCTION NOTES

GENERAL:

1. CONSTRUCT UTILITIES IN ACCORDANCE TO TOHO APPROVED PLANS AND SHOP DRAWINGS. ANY DEVIATION FROM THE APPROVED PLANS SHALL BE APPROVED BY THE DEVELOPER'S ENGINEER AND TOHO.
2. A PRECONSTRUCTION MEETING WITH THE TOHO'S STAFF IS REQUIRED PRIOR TO INITIATING CONSTRUCTION.
3. ALL REQUIRED PERMITS SHALL BE OBTAINED PRIOR TO INITIATING CONSTRUCTION.
4. A MINIMUM 12 FOOT WIDE ACCESS ROAD SHALL BE PROVIDED FOR ALL TOHO OWNED UTILITIES, WHICH ARE LOCATED OUTSIDE OF ROADWAYS. THE TOP 8" OF THE ACCESS ROAD SHALL BE STABILIZED TO A FLORIDA BEARING VALUE OF 75 PSI, AND COMPACTED TO 98% OF AASHTO T-180.
5. PIPE DEFLECTION CANNOT EXCEED 25% OF THE PIPE MANUFACTURER'S RECOMMENDATION.
6. REFERENCE TOHO'S STANDARDS, SPECIFICATIONS AND DETAILS, LATEST EDITION FOR ISSUES NOT SPECIFICALLY ADDRESSED BELOW OR ON THE TOHO ACCEPTED CONSTRUCTION PLANS.
7. CURRENT EDITION OF TOHO'S STANDARDS, SPECIFICATIONS AND DETAILS, AT TIME OF TOHO PLAN ACCEPTANCE SHALL SUPERSEDE ACCEPTED PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE TOHO STANDARDS, SPECIFICATIONS AND DETAILS ARE ADHERED TO IN CONSTRUCTION.

PERMITS, PLANS, SHOP DRAWINGS:

1. PERMITS OR LETTERS OF DETERMINATION FROM FDEP SHALL BE OBTAINED FOR THE SANITARY SEWER COLLECTION SYSTEM AND WATER DISTRIBUTION SYSTEM PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. A STAMPED ACCEPTED SET OF PLANS BY TOHO SHALL BE PRESENT ON THE SITE AT ALL TIMES. ACCEPTED PLANS ARE VALID FOR 12 MONTHS FROM THE DATE OF PLAN ACCEPTANCE. IF CONSTRUCTION DOES NOT BEGIN WITHIN THIS 12 MONTH PERIOD, THE DEVELOPER MUST CONTACT TOHO FOR A PROJECT STATUS REVIEW AND POSSIBLE APPROVAL FOR EXTENSION.
3. SHOP DRAWINGS FOR ALL WATER, REUSE, AND SANITARY SEWER MATERIALS AND STRUCTURES SHALL BE SUBMITTED TO TOHO PRIOR TO INITIATING CONSTRUCTION.
4. INSTALLATION OF MATERIALS AND/OR STRUCTURES PRIOR TO SHOP DRAWING APPROVAL IS DONE AT THE CONTRACTOR'S OWN RISK.
5. TWO HARD COPIES AND ONE ELECTRONIC COPY OF RECORD DRAWINGS SHALL BE SUBMITTED TO TOHO BEFORE THE FINAL INSPECTION. RECORD DRAWINGS SHALL CONFORM TO SECTIONS 11.6 OF TOHO'S STANDARDS, SPECIFICATIONS AND DETAILS, LATEST EDITION.

POTABLE WATER AND REUSE WATER – TESTING:

1. WATER LINE SHALL BE INSTALLED, CLEANED, FLUSHED, DISINFECTED AND BACTERIOLOGICALLY TESTED AND CLEARED FOR SERVICE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND FDEP RULES AND REGULATIONS.
   ALL WATER DISTRIBUTION SYSTEMS SHALL BE FLUSHED CLEAN OF ALL DELETERIOUS MATERIAL PRIOR TO ANY TESTING. LINES 4" AND GREATER SHALL BE PIGGED.
2. WATER LINE SHALL BE PRESSURE TESTED IN ACCORDANCE WITH AWWA-C600 (DUCTILE IRON PIPE) AND AWWAC605/M23 (PVC PIPE) SPECIFICATIONS AT 150 PSI AND WITNESSED BY TOHO PERSONNEL. NO LEAKAGE SHALL BE ALLOWED.
3. ALL TAPPING SADDLES AND SLEEVES SHALL BE PRESSURE TESTED AT 150 PSI AND WITNESSED BY TOHO PERSONNEL PRIOR TO INITIATING THE TAP.
4. ALL WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH THE LATEST VERSION OF AWWA C651 AND WITNESSED BY TOHO PERSONNEL
5. ALL BACTERIOLOGICAL SAMPLES SHALL BE WITNESSED BY TOHO PERSONNEL

WATER – MATERIALS:

1. PVC PIPE: FOUR (4) INCHES THROUGH TWELVE (12) INCHES SHALL BE AWWA C-900, LATEST EDITION. FOURTEEN (14) INCHES THROUGH THIRTY-SIX (36) INCHES SHALL BE AWWA C-905, LATEST EDITION.
2. DIP PIPE: FOUR (4)" THROUGH FIFTY-FOUR (54)" SHALL BE ANSI/AWWA A21.51/C151 WITH A MINIMUM WORKING PRESSURE CLASS 150 PIPE.

   ANY FITTINGS REQUIRED SHALL BE MECHANICAL JOINT DUCTILE IRON CONFORMING TO ANSI/AWWA A21.10/C110, 250 PSI MINIMUM PRESSURE RATING, OR DUCTILE IRON COMPACT FITTINGS IN ACCORDANCE WITH ANSI/AWWA A21.53/C153.

   JOINTS FOR DUCTILE IRON PIPE SHALL BE PUSH-ON OR MECHANICAL JOINTS CONFORMING TO ANSI/AWWA A21.11/C111. ABOVE GROUND JOINTS SHALL BE FLANGED WITH STAINLESS STEEL BOLTS, NUTS AND WASHERS. FLANGED JOINTS SHALL CONFORM TO ANSI STANDARD B 16.1-125 LB.

   WHERE DUCTILE IRON PIPE AND FITTINGS ARE TO BE BELOW GROUND OR INSTALLED IN A CASING PIPE THE COATING SHALL BE A MINIMUM 1.0 MIL THICK IN ACCORDANCE WITH ANSI/AWWA A21.51/C151.

   WHERE DUCTILE IRON PIPE AND FITTINGS ARE TO BE INSTALLED ABOVE GROUND, PIPE, FITTINGS AND VALVES SHALL BE THOROUGHLY CLEANED AND GIVEN ONE FIELD COAT (MINIMUM 1.5 MILS DRY THICKNESS) OF RUST INHIBITOR PRIMER, AND TWO FINISH COATS (MINIMUM 1.5 MILS DRY THICKNESS EACH).

   ALL DUCTILE IRON PIPE AND FITTINGS SHALL HAVE AN INTERIOR PROTECTIVE LINING OF CEMENT-MORTAR WITH A SEAL COAT OF ASPHALTIC MATERIAL IN ACCORDANCE WITH ANSI/AWWA A21.4/C104.

   THE PIPE SHALL BE POLYETHYLENE ENCASED (8 MIL) WHERE SHOWN ON THE PLANS, IN ACCORDANCE WITH ANSI/AWWA A21.51/C105.
3. POLYETHYLENE PIPE: FOUR (4)" THROUGH TWELVE (12)" SHALL BE AWWA STANDARD C906, PE3408 LATEST EDITION. THE POLYETHYLENE PIPE SHALL HAVE A MINIMUM WORKING PRESSURE RATING OF 160 PSI AND SHALL HAVE A STANDARD DIMENSION RATIO (SDR) OF 11. PIPE SHALL BE THE SAME ID AS DUCTILE IRON PIPE.

   POLYETHYLENE PIPE SHALL HAVE FUSION BONDED JOINTS.

   FITTINGS USED WITH POLYETHYLENE PIPE SHALL BE FUSION FITTINGS IN ACCORDANCE WITH AWWA STANDARD C906.
4. SERVICE PIPES: ALL SERVICE LINES SHALL BE ¾", 1", 1-1/2" OR 2", BLUE FOR POTABLE WATER AND PURPLE FOR REUSE WATER, PC200, SDR9, POLYETHYLENE TUBING CONFORMING TO SPECIFICATIONS IN AWWA C901, PE3608. 4" AND LARGER SERVICE PIPE SHALL BE C-900 PVC OR DIP. 3" SERVICE PIPE SHALL NOT BE PERMITTED.
5. VALVES SHALL BE RESILIENT WEDGE GATE VALVES.
6. VALVES SHALL BE LOCATED AT NOT MORE THAN 500 FOOT INTERVALS IN COMMERCIAL, INDUSTRIAL AND HIGH DENSITY RESIDENTIAL AREAS AND AT NOT MORE THAN 1000 FOOT INTERVALS IN ALL OTHER AREAS. APPROPRIATE VALVING SHALL ALSO BE PROVIDED ON ALL SIDES OF TEES AND CROSSES AND ON BOTH SIDES OF A DIRECTIONAL BORE OR JACK AND BORE.
7. ALL METERS SHALL BE INSTALLED BY TOHO AFTER ALL PAYMENT OF APPLICABLE FEES AND CHARGES. ALL METERS 2" AND LESS IN SIZE SHALL BE INSTALLED UNDERGROUND IN AN APPROVED METER BOX. METERS LARGER THAN 2" SHALL BE INSTALLED ABOVE GROUND. IN GENERAL, METERS 2" AND LARGER SHALL BE LOCATED IN A METER EASEMENT LOCATED ADJACENT TO THE PUBLIC RIGHT OF WAY AND OUTSIDE OF PAVED AREAS.

SEWER – TESTING:

PRIOR TO ANY TESTING TO BE WITNESSED, ALL PASSING SOIL DENSITY TESTS AND SLOPE SURVEYS SHALL BE SUBMITTED TO THE TOHO ENGINEER AND TO THE TOHO INSPECTOR.

1. ALL SANITARY MANHOLES SHALL BE INSPECTED BY TOHO PERSONNEL.
2. SANITARY SEWERS SHALL BE VIDEO INSPECTED AND WITNESSED BY TOHO PERSONNEL IN ACCORDANCE WITH THE TOHO STANDARDS, SPECIFICATIONS, AND DETAILS MANUAL, LATEST EDITION.
3. SANITARY SEWERS SHALL BE LOW PRESSURE AIR TESTED WITH NO ALLOWABLE LOSS AND WITNESSED BY TOHO PERSONNEL.
4. GRAVITY SANITARY SEWER MAINS SHALL REQUIRE A MANDREL TEST WHICH SHALL BE WITNESSED BY THE TOHO INSPECTOR IN ACCORDANCE WITH THE TOHO STANDARDS, SPECIFICATIONS, AND DETAILS MANUAL, LATEST EDITION.

GRAVITY SEWER – MATERIALS:

1. PVC PIPE: FOUR (4)" THROUGH FIFTEEN (15)" SHALL BE ASTM D3034, SDR 35. THE JOINTS SHALL BE INTEGRAL BELL ELASTOMERIC GASKET JOINTS MANUFACTURED IN ACCORDANCE WITH ASTM D3212 AND ASTM F477/APPLICABLE UNI-BELL PLASTIC PIPE ASSOCIATION STANDARD IS UNI B-4.

   PVC PIPE: EIGHTEEN (18)" THROUGH TWENTY-SEVEN (27)" SHALL BE ASTM F679, SDR 35. THE JOINTS SHALL BE INTEGRAL BELL ELASTOMERIC GASKET JOINTS MANUFACTURED IN ACCORDANCE WITH ASTM D3212 AND ASTM F477/ APPLICABLE UNI-BELL PLASTIC PIPE ASSOCIATION STANDARD IS UNI B-7.

   ALL PVC PIPE SHALL BEAR THE NSF-DW SEAL. THE MINIMUM STANDARD LENGTH OF PIPE SHALL BE THIRTEEN (13) FEET. PVC PIPE WITH LESS THAN 15 FT OF COVER SHALL BE SDR 35; 15 TO 20 FT SHALL BE SDR 26; AND 20 TO 30 FT SHALL BE SDR 18.
2. DIP PIPE: ANSI/AWWA A21.51/C151, CLASS THICKNESS DESIGNED PER ANSI/AWWA A21.50/C150, WITH FLANGE JOINTS. AN INTERIOR PROTECTIVE LINING OF "PROTECTO 401" EPOXY, OR EQUAL, WITH A MINIMUM DRY FILM THICKNESS 40 MILS. DIP SHALL ONLY BE USED ON ABOVE GROUND PIPE AT SANITARY LIFT STATIONS.
3. JOINT MATERIALS:
   - PVC SEWER PIPE JOINTS SHALL BE FLEXIBLE ELASTOMERIC SEALS PER ASTM D3212.
   - JOINTS BETWEEN PIPES OF DIFFERENT MATERIALS SHALL BE MADE WITH A RIGID, PVC, ADAPTOR COUPLING. FERNCO ADAPTERS SHALL ONLY BE PERMITTED WHEN TRANSITIONING BETWEEN CLAY PIPE AND PVC.

SEWER FORCE MAINS – TESTING:

1. FORCE MAIN PIPING SHALL BE INSTALLED AND PIGGED UNTIL CLEAN.
2. 2. FORCE MAIN SHALL BE PRESSURE TESTED IN ACCORDANCE WITH AWWA-C600 (DUCTILE IRON PIPE) AND AWWAC605/M23 (PVC PIPE) SPECIFICATIONS AT 100 PSI OR 1.5 TIMES THE OPERATING PRESSURE, WHICHEVER IS GREATER FOR A MINIMUM OF 2 HOURS AND WITNESSED BY TOHO PERSONNEL. NO LEAKAGE SHALL BE ALLOWED.

SEWER FORCE MAINS – MATERIALS:

1. PVC PIPE: FOUR (4)" THROUGH TWELVE (12)" SHALL BE AWWA STANDARD C900 AND A DIMENSION RATIO (DR) OF 25.

   PVC PIPE SHALL BE INTEGRAL BELL, PUSH-ON TYPE JOINTS.
2. DIP PIPE: FOUR (4)" THROUGH FIFTY-FOUR (54)" SHALL BE ANSI/AWWA A21.51/C151 WITH A MINIMUM OF PRESSURE CLASS 150 AND LINED WITH PROTECTO 401 OR EQUAL.

   ABOVE GROUND FITTINGS AND JOINTS SHALL BE FLANGED WITH T5 CADMIUM PLATED BOLTS, NUTS, AND WASHERS. FLANGED JOINTS SHALL CONFORM TO ANSI STANDARD B16.1-125 LB.

   DUCTILE IRON PIPE, FITTINGS, AND VALVES SHALL BE THOROUGHLY CLEANED AND GIVEN ONE FIELD COAT (MINIMUM 1.5 MILS DRY THICKNESS) OF RUST INHIBITOR PRIMER, AND TWO FINISH COATS (MINIMUM 1.5 MILS DRY THICKNESS EACH).

   ALL DUCTILE IRON PIPE AND FITTINGS SHALL HAVE AN INTERIOR PROTECTIVE LINING OF "PROTECTO 401" EPOXY OR EQUAL WITH A MINIMUM DRY FILM THICKNESS OF 40 MILS.
3. POLYETHYLENE (PE3408) PIPE: FOUR (4)" THROUGH TWELVE (12)" SHALL BE IN ACCORDANCE WITH AWWA STANDARD C906, LATEST EDITION. THE POLYETHYLENE PIPE SHALL HAVE A MINIMUM WORKING PRESSURE RATING OF 100 PSI AND SHALL HAVE A DIMENSION RATIO (DR) OF 17.

   POLYETHYLENE PIPE SHALL HAVE FUSION BONDED JOINTS.

   FITTINGS USED WITH POLYETHYLENE PIPE SHALL BE FUSION FITTINGS IN ACCORDANCE WITH AWWA STANDARD C906.
4. WASTEWATER FORCE MAINS SHALL BE EQUIPPED WITH AIR RELEASE VALVES LOCATED AT PIPING HIGH POINTS IMMEDIATELY UPSTREAM OF DIPS, OR OTHER ELEVATION DECLINES.
5. VALVES SHALL BE RESILIENT WEDGE GATE VALVES.
6. VALVES SHALL BE LOCATED AT NOT MORE THAN 2,000 FOOT INTERVALS IN ALL AREAS.

SEPARATION REQUIREMENTS:

PER F.D.E.P. REQUIREMENTS AND SUBJECT TO TOHO APPROVAL.

MISCELLANEOUS:

1. ALL TIE-INS TO EXISTING MANHOLES SHALL BE CORE DRILLED. CONNECT PIPE TO MANHOLE USING A FLEXIBLE CONNECTOR OR APPROVED A-LOK.
2. ALL MECHANICAL JOINTS SHALL BE RESTRAINED. THRUST BLOCKS ARE NOT PERMITTED ON TOHO MAINTAINED INFRASTRUCTURE.
3. MAINTAIN A MINIMUM 36" OF COVER MEASURED FROM THE BOTTOM OF THE SUB-GRADE TO THE TOP OF ALL WATER, REUSE, AND SANITARY SEWER PIPES. IF 36" OF COVER CANNOT BE MAINTAINED NOTIFY ENGINEER AND TOHO FOR EVALUATION.
4. GALVANIZED PIPE IS NOT ALLOWED AND IF ENCOUNTERED SHALL BE REPLACED WITH APPROVED MATERIALS.
5. 3M LOCATE TAPE SHALL BE INSTALLED 12" TO 18" OVER ALL PIPE BUT NO DEEPER THAN 4'. IF A MAIN IS MORE THAN 60" DEEP TO TOP OF PIPE THE 3M MARKER TAPE SHALL BE PLACED WITHIN THE TOP 3' OF FILL AND AN ADDITIONAL LAYER OF STANDARD METALLIC MARKING TAPE SHALL BE PLACE 12" ABOVE THE PIPE.
6. ALL PVC PIPE SHALL BE GREEN IN COLOR (FOR SEWER), BLUE IN COLOR (FOR WATER) AND PURPLE IN COLOR (FOR REUSE). DIP SHALL HAVE A CONTINUOUS 2" WIDE, PERMANENT BLUE/PURPLE STRIPE (OIL BASED ENAMEL) ON THE TOP OF THE PIPE.
7. DIRECTIONAL BORES SHALL USE 1 – 8 GAUGE STEEL CORE COPPER AND 1 – 8 GAUGE COPPER WIRE.
8. ONE COMPACTION TEST SHALL BE TAKEN FOR EACH 12" LAYER OF FILL FROM THE SPRINGLINE OF THE PIPE TO THE FINISH GRADE FOR EACH 300 FEET OF PIPE AND FOR EVERY 100 SQUARE FEET OF BACKFILL AROUND STRUCTURES.
9. ALL EXISTING WATER, REUSE AND SANITARY APPURTENANCES ON A PROJECT SITE WHICH MIGHT BE AFFECTED BY PROJECT WORK SHALL BE PROTECTED DURING CONSTRUCTION AND SHALL BE BROUGHT TO FINISHED GRADE PER THE TOHO STANDARDS, SPECIFICATIONS, AND DETAILS MANUAL, LATEST EDITION.
10. ALL TREE AND SHRUB ROOT BALLS SHALL BE PLACED WITH A MINIMUM OF 5' HORIZONTAL SEPARATION FROM TOHO MAINTAINED UTILITIES.
11. IF THE UNDERGROUND CONTRACTOR DE-MOBILIZES BETWEEN PHASES OF A PROJECT AND THE WATER DISTRIBUTION SYSTEM HAS BEEN CLEARED FOR USE BY FDEP, THE CONTRACTOR WILL BE REQUIRED TO INSTALL AUTOMATIC FLUSHING DEVICES ON ALL WATER MAIN DEAD-ENDS WHETHER INTENDED AS STUB-OUTS OR AS INCOMPLETE CONSTRUCTION. IF THE SITE HAS NOT BEEN CLEARED FOR USE BY FDEP, THE CONTRACTOR WILL BE REQUIRED TO PHYSICALLY DISCONNECT ALL UN-CLEARED MAINS FROM THE POINTS-OF-CONNECTION TO CLEARED MAINS.
12. WHEN REQUIRED BY ANOTHER REGULATORY AGENCY, MASONRY WALLS AROUND LIFT STATIONS SHALL REQUIRE BARBED WIRE AT THE TOP OF THE WALL. AT TOHO'S DISCRETION, ALTERNATIVE ANTI-CLIMB MEASURES MAY ALSO BE UTILIZED IN PLACE OF BARBED WIRE, HOWEVER, SIGNAGE WILL BE REQUIRED ON ALL EXTERIOR WALLS INDICATING THE USE OF ANTICLIMB MEASURES THAT MAY NOT BE VISIBLE.
13. ALL PERMANENT STRUCTURES INCLUDING, BUT NOT LIMITED TO BUILDING FOUNDATIONS, WALLS, AND LIGHT POLES SHALL BE PLACED WITH A MINIMUM 12' HORIZONTAL SEPARATION FROM ALL TOHO OWNED INFRASTRUCTURE.

811 Know what's below. Call before you dig.

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Thomas L. Knight, PE, on October 15, 2025.

Signature must be verified on any electronic copies.

REVISION	DATE
Revised per St. Cloud comments dated Sep. 5, 2025	Oct. 2025

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

TOHO WATER AUTHORITY GENERAL NOTES

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

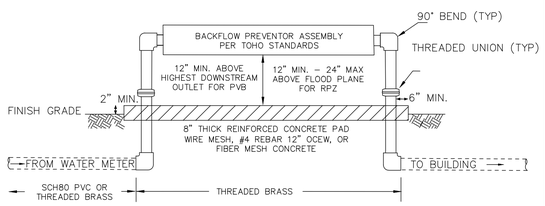
DATE
October 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
NONE

SHEET NUMBER
28



NOTES:

1. THIS DETAIL IS APPLICABLE FOR ALL SERVICES 2" AND SMALLER REQUIRING AN ABOVE GROUND BACKFLOW DEVICE.
2. BACKFLOW PREVENTOR TYPE SHALL BE PER TOHO STANDARDS.
3. BACKFLOW SIZE SHALL NOT BE MORE THAN ONE NOMINAL SIZE SMALLER OR LARGER THAN THE WATER METER.
4. BACKFLOW SHALL NOT BE PLACED MORE THAN 18" FROM THE METER.
5. PRESSURE VACUUM BREAKER BACKFLOWS SHALL BE INSTALLED 12" ABOVE THE HIGHEST OUTLET. ALL OTHER TYPES OF BACKFLOW PREVENTERS SHALL BE INSTALLED A MINIMUM OF 12" TO A MAXIMUM OF 24" ABOVE THE 100 YEAR FLOOD PLAIN.
6. NO PLANTINGS, STRUCTURES, OR OTHER UTILITIES, INCLUDING BUT NOT LIMITED TO TELECOM PEDESTALS, ELECTRICAL TRANSFORMERS OR POLES, ETC. SHALL BE INSTALLED WITHIN 36" OF ANY SIDE OF THE BACKFLOW ASSEMBLY OR PAD.
7. ALL SERVICE PIPING AND FITTINGS BETWEEN THE METER AND THE BELOW GRADE 90 DOWNSTREAM OF THE BACKFLOW SHALL BE SCH80 PVC OR THREADED NO LEAD BRASS.
8. ALL SERVICE PIPING AND FITTINGS BETWEEN THE TWO BELOW GRADE 90s SHALL BE THREADED NO LEAD BRASS.
9. 8" THICK CONCRETE PAD SHALL EXTEND A MINIMUM OF 6" BEYOND THE FURTHEST HORIZONTAL POINT OF THE ASSEMBLY ON ALL SIDES.
10. TOP OF CONCRETE PAD SHALL BE A MINIMUM OF 2" ABOVE FINISH GRADE.
11. STANDPIPES SHALL BE ISOLATED FROM THE CONCRETE PAD VIA EXPANSION JOINT OR OTHER SUITABLE MATERIAL.
12. PAD SHALL BE FIBER REINFORCED CONCRETE OR CONCRETE WITH WIRE MESH OR #4 REBAR 12" OCEW.

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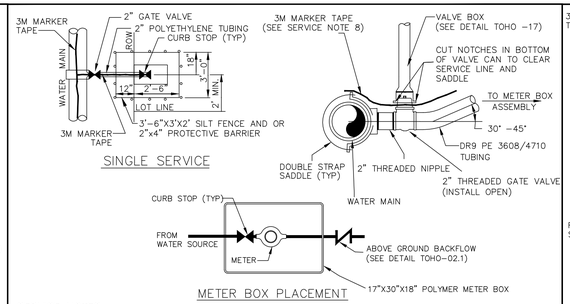
TYPICAL BACKFLOW ASSEMBLY — DRAWING NUMBER 02.1



SERVICE NOTES:

1. GATE VALVES SHALL BE RESILIENT WEDGE, CAST IRON, EPOXY COATED, THREADED INLET AND OUTLET WITH 2" OPERATING NUT.
2. CURB STOPS SHALL BE LOCKING TYPE, STRAIGHT BALL VALVE, NO LEAD BRASS.
   2.1. INLET SHALL BE PACK JOINT W/ CLAMP SCREW RETAINER.
   2.2. 1.5" AND 2" OUTLET SHALL BE 2 BOLT FLANGE METER CONNECTION.
   2.3. ¾" AND 1" OUTLET SHALL BE SWIVEL METER NUT CONNECTION MATCHING METER SIZE.
3. SERVICE LINE SHALL BE CONTINUOUS, NO FITTINGS ARE PERMITTED ON THE POLY LINE BETWEEN THE GATE VALVE AND THE CURB STOP.
4. NO CURB STOPS SHALL BE INSTALLED UNDER AN IMPERVIOUS SURFACE OR STRUCTURE.
5. SERVICE TAPS SHALL BE A MINIMUM OF 18" FROM JOINTS, FITTINGS, OR OTHER TAPS ON THE MAIN.
6. SERVICE TUBING SHALL BE POLYETHYLENE DR9, 200PSI. BLUE FOR POTABLE WATER, PURPLE FOR REUSE WATER.
7. PLACE APPROVED 3M MARKER TAPE TO THE CURB STOP(S) INSIDE THE BOX TIED TO THE MARKER TAPE AT THE MAIN.
8. SERVICE LINES SHALL BE MARKED IN THE CURB OR SIDEWALK IMMEDIATELY ADJACENT TO PARKING SPACES WITH A 3" TALL "W" FOR WATER OR A 3" TALL "R" FOR REUSE. MARKS SHALL BE PAINTED BLUE FOR WATER PURPLE FOR REUSE.
9. THIS DETAIL IS INTENDED FOR SINGLE 2" WATER SERVICES ONLY. NO MORE THAN 1 METER, REGARDLESS OF SIZE, SHALL BE PLACED ON COMMERCIAL SERVICES COVERED BY THIS DETAIL.

METER AND METER BOX PLACEMENT NOTES:

1. METERS ¾" TO 2" ARE PAID FOR BY THE DEVELOPER AND INSTALLED BY TOHO.
2. METER BOX(ES), SERVICE LINE(S), AND ALL ASSOCIATED APPURTENANCES ARE THE RESPONSIBILITY OF THE CONTRACTOR AND/OR DEVELOPER.
3. APPROVED BACKFLOW DEVICES ARE REQUIRED ON ALL COMMERCIAL SERVICES AND ARE THE RESPONSIBILITY OF THE CONTRACTOR ANS/OR DEVELOPER:
   3.1. RPZ BACKFLOW DEVICES SHALL BE INSTALLED A MINIMUM OF 12' ABOVE THE 100 YEAR FLOOD LEVEL.
   3.2. PVB BACKFLOW DEVICES SHALL BE INSTALLED A MINIMUM OF 12" ABOVE THE HIGHEST OUTLET.
   3.3. SEE DETAIL TOHO-02.1 TYPICAL BACKFLOW ASSEMBLY FOR ADDITIONAL REQUIREMENTS.
4. CURB STOP SHALL BE INSTALLED WITH THE OPERATING NUT FACING UP.
5. NO PLANTINGS, STRUCTURES, OR OTHER UTILITIES, INCLUDING BUT NOT LIMITED TO TELECOM PEDESTALS, ELECTRICAL TRANSFORMERS OR POLES, ETC. SHALL BE INSTALLED WITHIN 36" OF ANY SIDE OF THE METER BOX.
6. BUILDER SHALL MAKE FINAL HORIZONTAL AND VERTICAL ADJUSTMENTS TO METER ASSEMBLY AND BOX:
   6.1. METER SHALL BE APPROXIMATELY 7" BELOW FINISHED GRADE AND CENTERED IN THE BOX.
   6.2. METER BOX(ES) SHALL BE PERPENDICULAR TO THE CURB OR SIDEWALK.
   6.3. TOP OF METER BOX SHALL BE FLUSH WITH FINISH GRADE.
7. METER BOX LID SHALL BE SOLID PLASTIC WITH NO METAL ACCESS DOOR, BLACK FOR WATER, PURPLE FOR REUSE.

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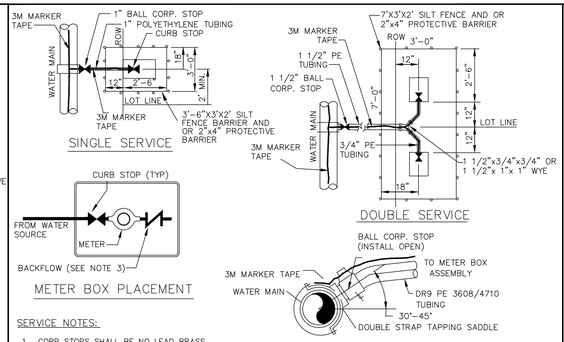
TYPICAL COMMERCIAL WATER SERVICE — DRAWING NUMBER 02.0



SERVICE NOTES:

1. CORP STOPS SHALL BE NO LEAD BRASS.
   1.1. INLET SHALL BE MATCHED TO TAPPING SADDLE.
   1.2. OUTLET SHALL BE FIP THREAD WITH PACK JOINT ADAPTER W/ CLAMP SCREW RETAINER FOR INDIVIDUAL SERVICES NOT PRESSURE TESTED AS PART OF AN OVERALL LARGER SYSTEM.
   1.3. OUTLET SHALL BE PACK JOINT W/ CLAMP SCREW RETAINER FOR INDIVIDUAL SERVICES PRESSURE TESTED AS PART OF AN OVERALL LARGER SYSTEM.
2. CURB STOPS SHALL BE LOCKING TYPE, STRAIGHT BALL VALVE, NO LEAD BRASS.
   2.1. INLET SHALL BE PACK JOINT W/ CLAMP SCREW RETAINER
   2.2. OUTLET SHALL BE SWIVEL METER NUT CONNECTION TO MATCH METER SIZE.
3. SERVICE WYES SHALL BE NO LEAD BRASS PACK JOINT W/ CLAMP SCREW RETAINER INLET AND OUTLET.
4. SERVICE LINE SHALL BE CONTINUOUS. NO FITTINGS ARE PERMITTED ON THE POLY LINE BETWEEN THE CORP STOP AND THE CURB STOP OR BETWEEN THE CORP STOP AND THE WYE AND THE WYE AND THE CURB STOP.
5. NO CURB STOPS SHALL BE INSTALLED UNDER AN IMPERVIOUS SURFACE OR STRUCTURE.
6. SERVICE TAPS SHALL BE A MINIMUM OF 18" FROM JOINTS, FITTINGS, OR OTHER TAPS ON THE MAIN.
7. SERVICE TUBING SHALL BE POLYETHYLENE DR9, 200PSI. BLUE FOR POTABLE, PURPLE FOR REUSE.
8. PLACE APPROVED 3M MARKER TAPE TO THE CURB STOP(S) INSIDE THE BOX AND TIED INTO THE MARKER TAPE AT THE MAIN.
9. SERVICE LINES SHALL BE MARKED IN THE CURB OR SIDEWALK IMMEDIATELY ADJACENT TO PARKING SPACES WITH A 3" TALL "W" FOR WATER OR 3" TALL "R" FOR REUSE. MARKS SHALL BE PAINTED BLUE FOR WATER AND PURPLE FOR REUSE.
10. THIS DETAIL IS INTENDED FOR ¾" AND 1" RESIDENTIAL METERS ONLY. FOR 1.5" OR 2" METERS REFER TO TOHO-02.
11. THIS DETAIL IS INTENDED FOR SINGLE OR DOUBLE SERVICE RESIDENTIAL CONNECTIONS ONLY. FOR GROUPS OF 3 -8 METERS REFER TO TOHO-03.0, TOHO-03.1, AND TOHO-03.2

METER AND METER BOX PLACEMENT NOTES

1. METERS ¾" TO 1" ARE PAID FOR BY THE DEVELOPER AND INSTALLED BY TOHO.
2. METER BOX(ES), SERVICE LINE(S), AND ALL ASSOCIATED APPURTENANCES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR DEVELOPER.
3. TOHO PROVIDES APPROVED IN-GROUND BACKFLOW DEVICES ON ALL ¾" AND 1" RESIDENTIAL METERS.
4. CURB STOP SHALL BE INSTALLED WITH THE OPERATING NUT FACING UP.
5. NO PLANTINGS, STRUCTURES, OR OTHER UTILITIES, INCLUDING BUT NOT LIMITED TO TELECOM PEDESTALS, ELECTRICAL TRANSFORMERS OR POLES, ETC. SHALL BE INSTALLED WITHIN 36" OF ANY SIDE OF THE METER BOX.
6. BUILDER SHALL MAKE FINAL HORIZONTAL AND VERTICAL ADJUSTMENTS TO METER ASSEMBLY AND BOX:
   6.1. METER SHALL BE APPROXIMATELY 7" BELOW FINISHED GRADE AND CENTERED IN THE BOX.
   6.2. SINGLE LOT SERVICES SHALL HAVE BOX(ES) PERPENDICULAR TO THE CURB OR SIDEWALK.
   6.3. DOUBLE LOT SERVICES SHALL HAVE BOX(ES) PARALLEL TO THE CURB OR SIDEWALK.
   6.4. TOP OF METER BOX(ES) SHALL BE FLUSH WITH FINISH GRADE.
7. METER BOX LID SHALL BE SOLID PLASTIC WITH NO METAL ACCESS DOOR, BLACK FOR WATER, PURPLE FOR REUSE.

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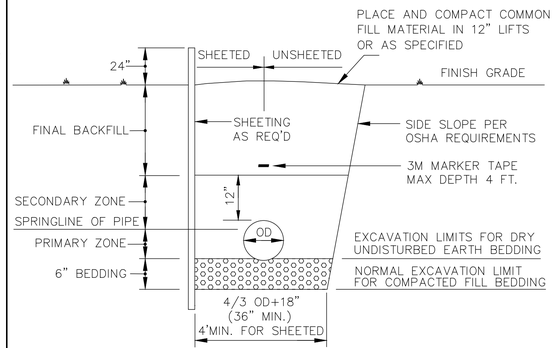
TYPICAL POTABLE WATER SERVICE — DRAWING NUMBER 01.0



NOTES:

1. PRIMARY & SECONDARY ZONES SHALL BE INDIVIDUALLY COMPACTED LAYERS OF CLEAN FILL.
2. COMPACTION OF BACKFILL BENEATH PAVEMENT SHALL BE 98% OF AASHTO T-180, ALL OTHER AREAS SHALL BE 95% OF AASHTO T-180 UNLESS OTHERWISE REQUIRED BY ANOTHER AUTHORITY HAVING JURISDICTION.
3. PLACE APPROVED 3M MARKER TAPE OR EQUAL DIRECTLY ABOVE THE CENTERLINE OF THE PIPE.
   3.1. TAPE SHALL BE 12"-18" ABOVE THE PIPE.
   3.2. TAPE SHALL NOT EXCEED 4' DEPTH.
   3.3. IF TOP OF PIPE IS GREATER THAN 5' DEEP, AN ADDITIONAL LAYER OF WARNING TAPE SHALL BE PROVIDED 12"-18" OVER THE PIPE AND THE MARKER TAPE SHALL BE PLACED AT A DEPTH NOT TO EXCEED 4'.
4. SLOPES, BENCHING, AND/OR SHORING SHALL BE PER OSHA REQUIREMENTS.

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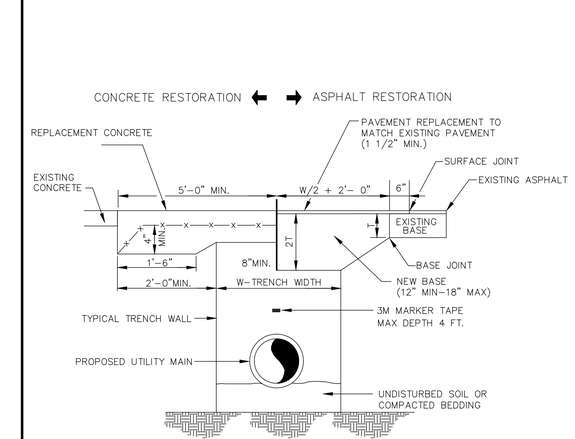
TYPICAL PIPE TRENCH — DRAWING NUMBER 14



NOTES:

1. SURFACE AND BASE CUTS SHALL BE SAW CUT.
2. LONGITUDINAL OR DIAGONAL CUTS REQUIRE OVERLAY/RESURFACING OF THE COMPLETE WIDTH OF THE ROAD.
3. CUTS AT INTERSECTIONS REQUIRE COMPLETE OVERLAY/RESURFACING TO THE END OF ALL RETURN TURNOUTS AND/OR 10' BEYOND THE CUT(S), WHICHEVER IS GREATER.
4. CUTS THRU TURNOUTS AND CUL-DE-SACS REQUIRE COMPLETE OVERLAY/RESURFACING
5. COMPACTION OF BACKFILL SHALL BE 98% OF AASHTO T-180.
6. PLACE APPROVED 3M MARKER TAPE OR EQUAL DIRECTLY ABOVE THE CENTERLINE OF THE PIPE.
   6.1. TAPE SHALL BE 12"-18" ABOVE THE PIPE.
   6.2. TAPE SHALL NOT EXCEED 4' DEPTH.
   6.3. IF TOP OF PIPE IS GREATER THAN 5' DEEP, AN ADDITIONAL LAYER OF WARNING TAPE SHALL BE PROVIDED 12"-18" OVER THE PIPE AND THE MARKER TAPE SHALL BE PLACED AT A DEPTH NOT TO EXCEED 4'.
7. SLOPES, BENCHING, AND/OR SHORTING SHALL BE PER OSHA REQUIREMENTS.
8. THIS DETAIL APPLIES TO OPEN CUTS NOT LOCATED WITHIN PUBLIC RIGHTS-OF-WAY OR OTHERWISE NOT DICTATED BY ANOTHER AUTHORITY HAVING JURISDICTION.

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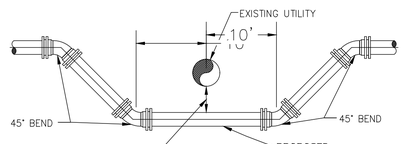
OPEN CUT — DRAWING NUMBER 15



UTILITY CROSSING DETAIL

PROPOSED UTILITY	MINIMUM HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS							
	POTABLE WATER		RECLAIMED WATER		SANITARY SEWER (GRAVITY & F.M.)		STORM DRAIN	
	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.
POTABLE WATER	3'	6"	3'	12"	6' ALLOWED 10' PREFERRED	12"	3'	12"
RECLAIMED WATER	3'	12"	3'	6"	3'	12"	3'	6"
SANITARY SEWER	6' ALLOWED 10' PREFERRED	12"	3'	12"	3'	6"	3'	6"

NOTES:

1. PIPE RESTRAINTS SHALL BE PER THE THRUST RESTRAINT DETAIL TOHO-19 AND RESTRAINED JOINT TABLE TOHO-20.
2. THIS TABLE REPRESENTS THE MINIMUM SEPARATION REQUIREMENTS AS DESCRIBED IN F.D.E.P. RULES OF THE FLORIDA ADMINISTRATION CODE (F.A.C.) AND TOHO'S SEPARATION REQUIREMENTS TO FACILITATE FUTURE MAINTENANCE. THESE REQUIREMENTS SHALL APPLY BETWEEN PROPOSED UTILITY LINES AND EXISTING OR PROPOSED UTILITY LINES. ADDITIONAL SEPARATION BASED ON PIPE SIZE(S) AND LOCATION MAY BE REQUIRED AT TOHO'S DISCRETION.
3. RECLAIMED WATER IS DEFINED AS UNRESTRICTED PUBLIC ACCESS REUSE WATER AS DEFINED BY F.A.C. 17-610. OTHER TYPES OF RECLAIMED WATER ARE CONSIDERED RAW SEWAGE AND SEPARATIONS LISTED FOR SANITARY SEWER SHALL APPLY.
4. ALL SEPARATION DISTANCES ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE UNLESS OTHERWISE SPECIFIED:
   4.1. AT TOHO'S DISCRETION, THE HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY SANITARY SEWER MAINS MAY BE REDUCED TO 3' WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6" ABOVE THE TOP OF THE SEWER MAIN.
   4.2. AT TOHO'S DISCRETION THE VERTICAL SEPARATION FOR WATER MAINS AND STORM SEWER MAINS OR GRAVITY SEWER MAINS MAY BE REDUCED TO 6" IF THE WATER MAIN IS LOCATED ABOVE THE STORM SEWER OR GRAVITY SEWER MAIN(S).
5. WHERE POTABLE WATER AND SANITARY SEWER MAINS OR RECLAIM WATER MAINS CROSS, THE WATER MAIN SHALL BE CENTERED ON THE CROSSING. ALL WATER MAIN JOINTS SHALL BE AT LEAST 6' AWAY FROM ALL SEWER OR RECLAIM JOINTS AND AT LEAST 3' AWAY FROM ALL STORM SEWER JOINTS.
6. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SANITARY SEWER OR STORM SEWER MANHOLE, STRUCTURE, OR PIPE.
7. IF 36" MINIMUM DEPTH OF COVER IS NOT MAINTAINED, SPECIAL PROTECTION OR PIPE MATERIAL MAY BE REQUIRED AT THE DIRECTION OF TOHO.

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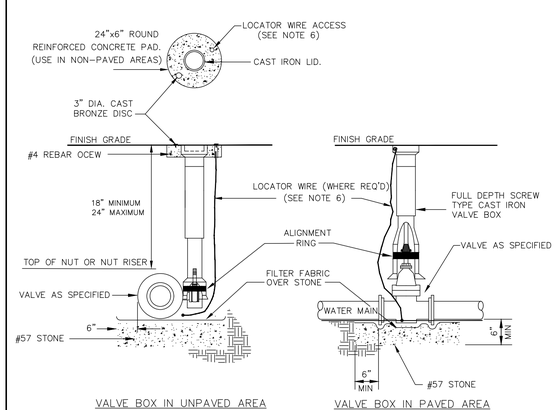
PIPE CLEARANCES AND CROSSINGS — DRAWING NUMBER 16



NOTES:

1. #57 STONE BEDDING SHALL BE REQUIRED A MINIMUM DEPTH OF 6" BELOW ALL VALVES. PLACE FILTER FABRIC OVER STONE PRIOR TO SETTING VALVE.
2. NO PLANTINGS, STRUCTURES, OR OTHER UTILITIES, INCLUDING BUT NOT LIMITED TO TELECOM PEDESTALS, ELECTRICAL TRANSFORMERS OR POLES, ETC. SHALL BE INSTALLED WITHIN 36" OF ANY SIDE OF ANY VALVE.
3. OPERATING NUT SHALL BE BOLTED, SHEER PINS ARE NOT PERMITTED.
4. WHERE THE VALVE OPERATING NUT MUST BE SET DEEPER THAN 24", A BOLT ON VALVE NUT RISER SHALL BE REQUIRED.
5. TWO PIECE FULL DEPTH CAST IRON SCREW TYPE ADJUSTABLE VALVE BOXES ARE REQUIRED. PVC, DIP, OR CI VALVE BOX EXTENSIONS ARE NOT PERMITTED.
6. LOCATOR WIRE ACCESS FOR DIRECTIONAL BORE OR JACK AND BORE APPLICATIONS:
   6.1. IN UNPAVED AREAS USE 2" SCH80 PVC, FEMALE ADAPTER COUPLING AND 2" BRASS PLUG W/ RECESSED NUT SET IN THE VALVE PAD.
   6.2. IN PAVED AREAS TERMINATE THE LOCATE WIRE INSIDE THE TOP PORTION OF THE VALVE BOX.
   6.3. PROVIDE A MINIMUM OF 12" OF EXTRA WIRE ABOVE FINISHED GRADE.
7. PRIVATELY MAINTAINED SYSTEMS SHALL HAVE 'PRIVATE' STAMPED ON THE BRONZE DISC.
8. DEDICATED FIRE LINES SHALL HAVE 'FIRE' STAMPED ON THE BRONZE DISC AND THE VALVE COVER SHALL BE PAINTED RED.

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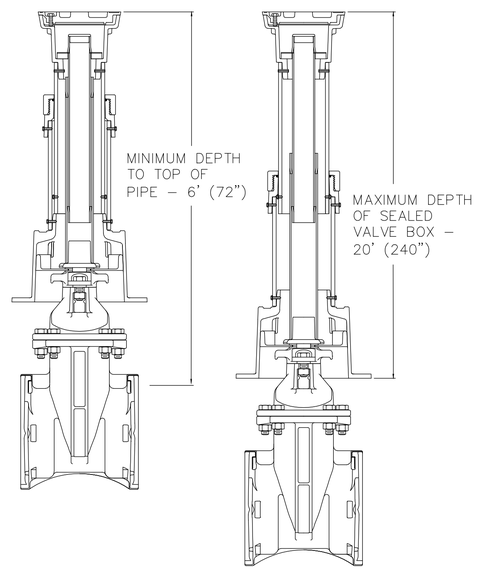
VALVE AND BOX — DRAWING NUMBER 17.0



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DRAWN BY:	APC
REVISED BY:	DT

ADJUSTABLE SEALED VALVE BOX — DRAWING NUMBER 17.1

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Thomas L. Knight, PE, on October 15, 2025.

Signature must be verified on any electronic copies.

REVISION	DATE
Revised per St. Cloud comments dated Sep. 5, 2025	Oct. 2025

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES
SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

TOHO WATER AUTHORITY WATER DETAILS

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

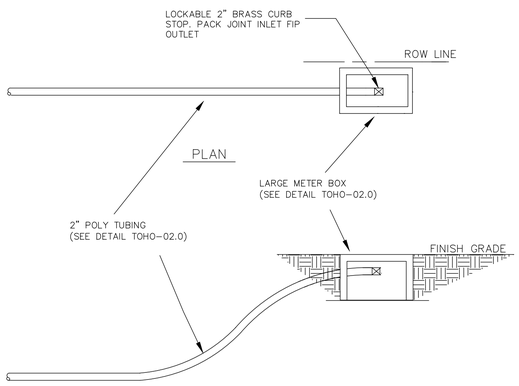
DATE
October 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
NONE

SHEET NUMBER
29



NOTES:

1. BLOWOFF SHALL TERMINATE WITH A 2" LOCKABLE CURB STOP IN A PLASTIC DOUBLE METER BOX.
2. BOX SHALL BE SET PER DETAILS TOHO-01, TOHO-01.1, & TOHO-0.2.
3. MAIN SHALL BE PLUGGED PRIOR TO INSTALLING BLOWOFF.
4. ALL SADDLES, STOPS, & FITTINGS SHALL BE NO LEAD BRASS PACK JOINT W/ CLAMP SCREW RETAINER. NO GALVANIZED PIPE OR FITTINGS ALLOWED.

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/22/2025
PREVIOUS VERSION:	0022
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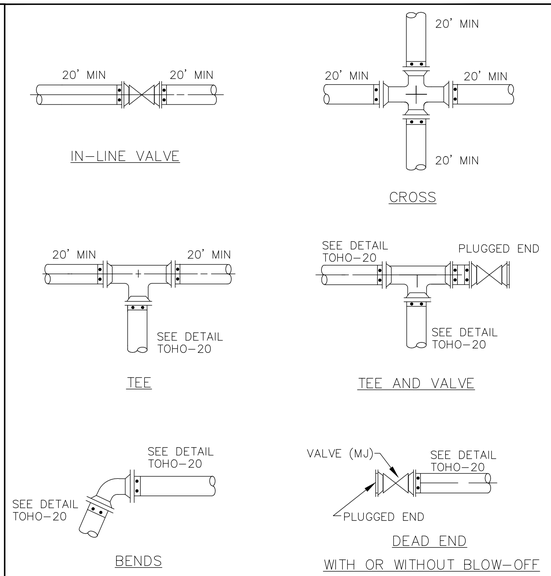
BLOW-OFF — DRAWING NUMBER 25



NOTES:

1. MECHANICAL PIPE RESTRAINT SYSTEMS SHALL BE REQUIRED. THRUST BLOCKS WILL ONLY BE PERMITTED ON A CASE-BY-CASE BASIS AS DETERMINED BY TOHO.
2. ALL MECHANICAL JOINT FITTINGS (TEES, BENDS, CROSSES, ELBOWS, ETC.) AND VALVES SHALL BE RESTRAINED.
3. RESTRAIN THRU VALVES.

EFFECTIVE DATE:	04/01/2025
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DRAWN BY:	MP
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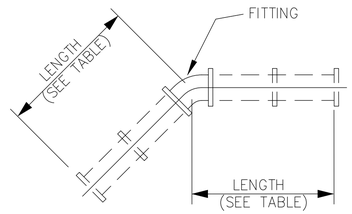
THRUST RESTRAINT — DRAWING NUMBER 19



MINIMUM LENGTH (IN FEET) OF RESTRAINED PIPE REQUIRED

PIPE SIZE (DIAMETER IN INCHES)	BENDS										OTHER FITTINGS					
	90°		45°		22 1/2°		11 1/4°		VERTICAL BENDS		DEAD END		CROSS OR VALVE		TEE BRANCH	
	100psi	150psi	100psi	150psi	100psi	150psi	100psi	150psi	100psi	150psi	100psi	150psi	100psi	150psi	100psi	150psi
4"	20'	20'	20'	20'	20'	20'	20'	20'	20'	20'	40'	40'	20'	20'	40'	40'
6"	20'	40'	20'	20'	20'	20'	20'	20'	20'	40'	40'	60'	20'	20'	40'	40'
8"	20'	40'	20'	20'	20'	20'	20'	20'	40'	40'	40'	80'	20'	20'	40'	40'
12"	40'	40'	20'	20'	20'	20'	20'	20'	40'	60'	60'	100'	20'	20'	40'	40'
14"	40'	60'	20'	20'	20'	20'	20'	20'	40'	60'	80'	120'	20'	20'	40'	40'
16"	40'	60'	20'	20'	20'	20'	20'	20'	40'	60'	80'	120'	20'	20'	40'	60'
20"	40'	60'	20'	40'	20'	20'	20'	20'	60'	80'	100'	160'	20'	20'	40'	80'
24"	60'	80'	20'	40'	20'	20'	20'	20'	60'	80'	120'	180'	20'	20'	40'	100'
30"	60'	80'	40'	40'	20'	20'	20'	20'	80'	100'	140'	200'	20'	20'	60'	140'

NOTES:

1. THE ABOVE THRUST RESTRAINT TABLE SHALL BE USED FOR THE FOLLOWING TRENCH CONDITIONS:
   1.a MINIMUM 50% SOIL RETAINED ON A NUMBER 200 SIEVE
   1.b MINIMUM 98% COMPACTION, AASHTO T-180 UNDER PAVEMENT
   1.c MINIMUM 95% COMPACTION, AASHTO T-180 ALL OTHER AREAS
   1.d MINIMUM 3' OF COVER
2. THE ABOVE TABLE SPECIFIES THE LENGTH OF RESTRAINED PIPE SECTIONS REQUIRED, IN EACH DIRECTION OF PIPE ON EXTENDED CENTERLINE OF FITTING.
3. WHERE CONDITIONS VARY FROM THE ABOVE TABLE, A FLORIDA REGISTERED PROFESSIONAL ENGINEER MUST DETERMINE THE REQUIRED LENGTH OF OF RESTRAINED PIPE.
4. ALL FITTINGS, VALVES AND RESTRAINED PIPE SHALL BE RESTRAINED WITH TOHO APPROVED MATERIALS.

EFFECTIVE DATE:	04/01/2025
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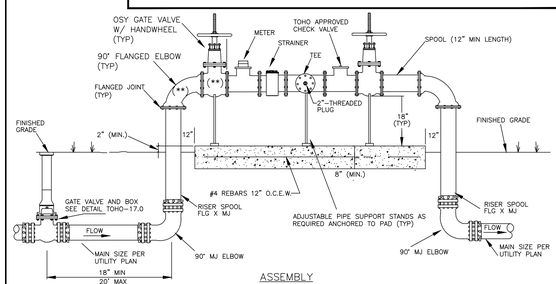
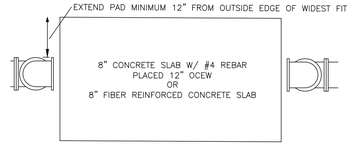
RESTRAINED JOINT TABLE — DRAWING NUMBER 20



ASSEMBLY



TOP VIEW

NOTES:

1. ALL FITTINGS INCLUDING BUT NOT LIMITED TO THE STRAINER, METER, CHECK VALVE, TEE, ETC. SHALL BE THE RESPONSIBILITY OF THE DEVELOPER AND/OR CONTRACTOR TO PROVIDE AND INSTALL.
2. GALVANIZED PIPE, SCH PVC PIPE, THREADED, OR PUSH JOINT FITTINGS ARE NOT ALLOWED.
3. PROTECTIVE BOLLARD(S) MAY BE REQUIRED AT THE DISCRETION OF TOHO.
4. MAINTAIN A MINIMUM 3' CLEARANCE AROUND ALL SIDES OF THE ASSEMBLY FREE OF PLANTINGS, STRUCTURES, OTHER UTILITIES, ETC.
5. IF CHEMICAL INJECTION IS USED, THE CHECK VALVE SHALL BE REPLACED WITH A REDUCED PRESSURE ZONE (RPZ) BACKFLOW DEVICE AT THE OWNER'S EXPENSE.
6. ALL ABOVE GROUND PIPING SHALL BE PAINTED PANTONE PURPLE.
7. WHERE REUSE IS UNAVAILABLE AND THE SYSTEM IS JUMPED TO POTABLE WATER:
   7.1. SEE TOHO-22.1 POTABLE REUSE JUMPER LAYOUT DETAIL FOR ADDITIONAL INFORMATION.
   7.2. PROVIDE A TEE BETWEEN THE ELBOW AND GV MARKED WITH (**) ABOVE. THE BRANCH OF THE TEE SHALL BE PARALLEL TO THE GROUND AND SHALL FACE AWAY FROM THE PAVEMENT OR TRAVELWAY.
   7.3. PROVIDE A REDUCED PRESSURE ZONE (RPZ) BACKFLOW PREVENTER ON THE BRANCH OF THE TEE.
   7.4. PAINT THE ABOVE GROUND PIPING UP TO AND INCLUDING THE RPZ BACKFLOW BLUE AND ALL ABOVE GROUND PIPING DOWNSTREAM OF THE RPZ BACKFLOW PANTONE PURPLE.

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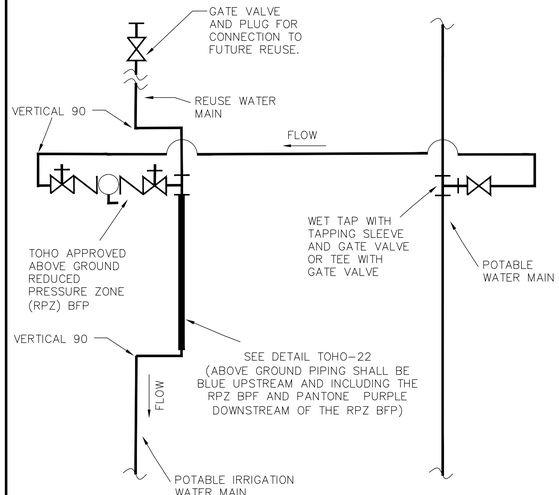
LARGE REUSE METER ASSEMBLY — DRAWING NUMBER 22.0



SEE DETAIL TOHO-22.2 FOR JUMPER CONFIGURATION CONVERSION WHEN REUSE BECOMES AVAILABLE FOR CONNECTION.

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/22/2025
PREVIOUS VERSION:	NA
DRAWN BY:	DT
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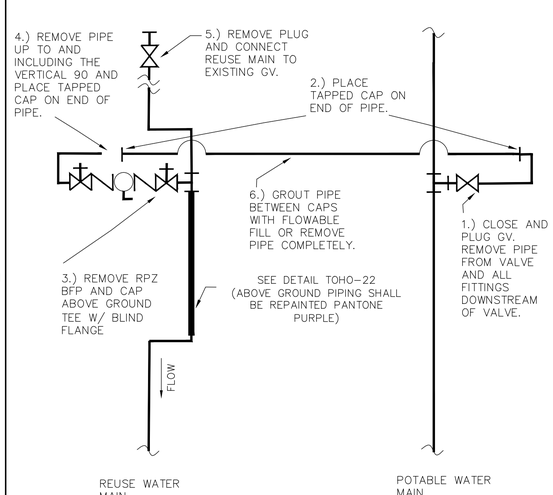
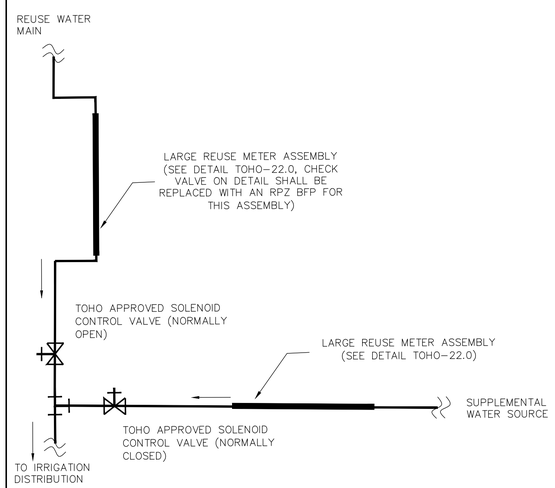
POTABLE TO REUSE JUMPER LAYOUT — DRAWING NUMBER 22.1



EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/22/2025
PREVIOUS VERSION:	NA
DRAWN BY:	DT
REVISED BY:	DT

POTABLE TO REUSE JUMPER REMOVAL — DRAWING NUMBER 22.2



NOTES:

1. SOLENOID CONTROL VALVES SHALL BE ELECTRONICALLY ACTUATED. PRESSURE TRANSMITTERS LOCATED UPSTREAM OF THE METER ASSEMBLIES SHALL BE PROVIDED BY THE OWNER/DEVELOPER AND INSTALLED BY THE CONTRACTOR.
2. ELECTRONIC ACTUATION WILL REQUIRE PERMANENT SHORE POWER TO BE PROVIDED BY THE OWNER/DEVELOPER AND INSTALLED BY THE CONTRACTOR.
3. SOLENOID CONTROL VALVES TO BE INSTALLED IN-GROUND IN TOHO APPROVED VAULTS.
4. WHERE REQUIRED, ELECTRONIC CONTROL OR INTERFACE DEVICES SHALL BE INSTALLED NEXT TO THE METER REGISTERING TOHO REUSE WATER FLOW.
5. VALVES, ELECTRONICS, AND SITE SPECIFIC PLAN SHALL BE PROVIDED BY THE OWNER/DEVELOPER AND APPROVED BY TOHO PRIOR TO CONSTRUCTION.

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/22/2025
PREVIOUS VERSION:	NA
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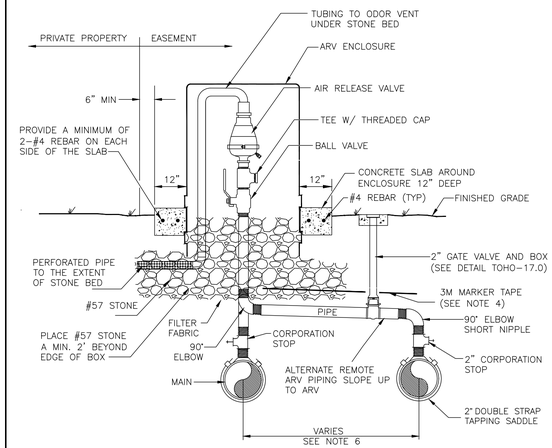
REUSE WITH SUPPLEMENTAL IRRIGATION LAYOUT — DRAWING NUMBER 22.3



NOTES:

1. FOR SANITARY FORCE MAIN ARVs ALL SADDLES, STOPS, FITTINGS, PIPING, ETC. SHALL BE STAINLESS STEEL SIZED TO THE ARV INLET.
2. WHERE DESIGNATED APPROPRIATE BY TOHO, WATER OR REUSE MAIN ARVs MAY BE REQUIRED. WATER AND REUSE ARV SADDLES, STOPS, FITTINGS, AND PIPING MATERIAL SHALL BE AT THE DIRECTION OF TOHO.
3. PLACE #57 STONE BEDDING UNDER THE ENCLOSURE AND PAD. PLACE FILTER FABRIC UNDER, AROUND, AND OVER THE #57 STONE PRIOR TO PLACING THE ENCLOSURE AND PAD.
4. PLACE APPROVED 3M MARKER TAPE ABOVE THE OFFSET PIPE, NOT TO EXCEED A DEPTH OF 4' AND TIED INTO THE MARKER TAPE ON THE MAIN.
5. ENCLOSURE VENTS MUST BE CAPABLE OF ALLOWING THE SAME AIRFLOW AS THE ARV AS MEASURED IN CFM.
6. OFFSET REQUIREMENT AND DISTANCE SHALL BE DETERMINED BY TOHO BASED ON FIELD CONDITIONS AND SITE CONSTRAINTS.
7. THIS DETAIL APPLIES TO 2" ARVs FOR 12" OR SMALLER MAINS. MAINS LARGER THAN 12" SHALL HAVE ARVs INSTALLED PER TOHO-18.1.

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/22/2025
PREVIOUS VERSION:	0022
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STANDARD AIR RELEASE VALVE — DRAWING NUMBER 18.0

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

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DATE	REVISION
Oct. 2025	Revised per St. Cloud comments dated Sep. 5, 2025

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OLD HICKORY TREE ESTATES

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OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

TOHO WATER AUTHORITY WATER DETAILS

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

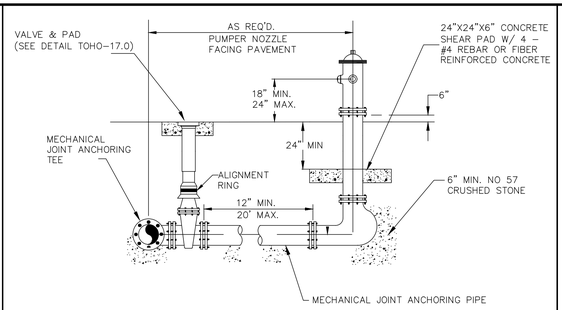
DATE
October 2025

DRAWN BY
TLK/JMK

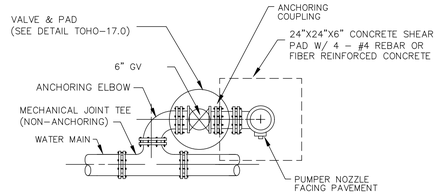
PROJECT NUMBER
23-12

SCALE
NONE

SHEET NUMBER
30



TYPICAL CONDITION

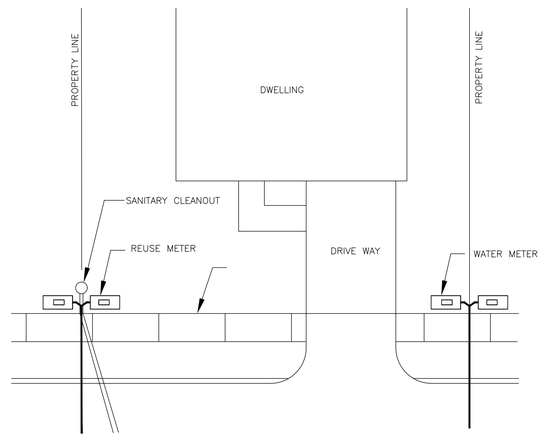


LIMITED RIGHT-OF-WAY CONDITION

NOTES:

1. HYDRANT SHALL BE SUPPLIED WITHOUT A WEEP HOLE OR WITH A PERMANENTLY PLUGGED WEEP HOLE.
2. CLEARANCE BETWEEN BOTTOM OF BOLTS AND FINISH GRADE SHALL BE 6" MINIMUM.
3. CLEARANCE BETWEEN CENTER OF PUMPER NOZZLE AND FINISH GRADE SHALL BE 18" MINIMUM AND 24" MAXIMUM.
4. PLANTING CLEAR AREA(S) SHALL BE PER APPLICABLE FIRE CODE(S).
5. IF HYDRANT IS LOCATED MORE THAN 20 LINEAR FEET FROM THE MAIN OR ON THE OPPOSITE SIDE OF A TRAVELWAY FROM THE MAIN, AN ADDITIONAL GATE VALVE SHALL BE REQUIRED IMMEDIATELY UPSTREAM OF THE HYDRANT.
6. VALVE, VALVE BOX, & PAD SHALL BE INSTALLED PER THE TOHO VALVE & BOX DETAIL TOHO-17.

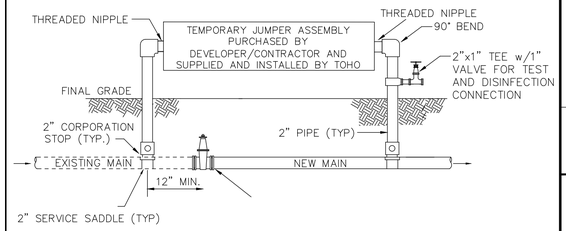
Toho Water Authority	EFFECTIVE DATE:	04/01/2025	FIRE HYDRANT	DRAWING 26
	BOARD APPROVED DATE:	01/28/2025		
	PREVIOUS VERSION:	0022		
	DRAWN BY:	MP		
	REVISED BY:	DT		



NOTES:

1. PRIOR TO SETTING METERS, ALL PROPERTY CORNERS AND BACK OF SIDEWALK SHALL BE STAKED.
2. ALL METER BOXES AND VAULTS SHALL BE SET PER DETAILS TOHO-01.0, TOHO-01.1, TOHO-02.0, AND TOHO-03.0, 03.1, AND 03.2
3. ALL CLEANOUTS SHALL BE SET PER DETAIL TOHO-06.0 AND TOHO-06.1. NO CLEANOUTS SHALL BE PLACED IN SIDEWALKS OR WALKWAYS.
4. THE HOMEBUILDER SHALL BE RESPONSIBLE FOR MAINTAINING NEWLY INSTALLED AND/OR EXISTING HYDRANTS, AUTOMATIC FLUSHING DEVICES, VALVES, MANHOLES, AND SERVICES UNTIL SUCH TIME AS THE CERTIFICATE OF OCCUPANCY IS ISSUED BY THE PERMITTING AUTHORITY. THE HOMEBUILDER'S RESPONSIBILITY SHALL EXTEND FROM PROPERTY LINE TO PROPERTY LINE AND FROM THE MIDDLE OF THE ROAD TO THE EDGE OF THE UTILITY EASEMENT ON THE PROPERTY AS WELL AS ADJACENT/ADJOINING COMMON AREAS.
5. NO PLANTINGS, STRUCTURES, OR OTHER UTILITIES, INCLUDING BUT NOT LIMITED TO TELECOM PEDESTALS, ELECTRICAL TRANSFORMERS OR POLES, ETC. SHALL BE INSTALLED WITHIN 36" OF ANY METER BOX, CLEANOUT, VALVE, OR AUTOMATIC FLUSHING DEVICE

Toho Water Authority	EFFECTIVE DATE:	04/01/2025	SERVICE LOCATIONS	DRAWING 29
	BOARD APPROVED DATE:	01/28/2025		
	PREVIOUS VERSION:	0022		
	DRAWN BY:	MP		
	REVISED BY:	DT		



NOTES:

1. A TEMPORARY JUMPER CONNECTION IS REQUIRED AT ALL CONNECTIONS BETWEEN EXISTING FDEP CLEARED POTABLE AND REUSE WATER MAINS AND PERMITTED WATER AND REUSE MAIN IMPROVEMENTS.
2. THE DETAIL ABOVE IS TO BE USED FOR PIGGING AND PRESSURE TESTING ALL PRESSURE MAINS AND FILLING, CHLORINATING, AND SAMPLING NEW POTABLE WATER MAINS.
3. UNTIL SUCH TIME AS FDEP HAS CLEARED THE POTABLE WATER MAIN FOR USE, OR TOHO HAS CLEARED THE POTABLE OR REUSE MAIN FOR USE IF NO FDEP PERMIT IS REQUIRED, THE JUMPER MUST REMAIN ON AND THE VALVE BETWEEN THE OLD AND NEW SYSTEMS MUST REMAIN CLOSED.
4. THE DEVELOPER AND/OR CONTRACTOR WILL PURCHASE THE TEMPORARY JUMPER ASSEMBLY FROM TOHO. ONLY JUMPERS PURCHASED AND INSTALLED BY TOHO ARE PERMITTED.
5. REMOVAL OR RELOCATION OF JUMPERS SHALL ONLY BE PERFORMED BY TOHO PERSONNEL.
6. 2" TAPS AND SERVICES UPSTREAM AND DOWNSTREAM OF THE JUMPER ASSEMBLY SHALL BE PER DETAIL TOHO-01.0, TOHO-01.1, AND TOHO-02.0.
7. GALVANIZED PIPE AND/OR FITTINGS ARE NOT ALLOWED.
8. ABANDONED JUMPER CONNECTIONS MUST BE INCLUDED ON THE FINAL RECORD DRAWINGS.

Toho Water Authority	EFFECTIVE DATE:	04/01/2025	TEMPORARY JUMPER	DRAWING 30
	BOARD APPROVED DATE:	01/28/2025		
	PREVIOUS VERSION:	0022		
	DRAWN BY:	MP		
	REVISED BY:	DT		

REVISION	DATE
Revised per St. Cloud comments dated Sep. 5, 2025	Oct. 2025

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OLD HICKORY TREE ESTATES

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OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

TOHO WATER AUTHORITY WATER DETAILS

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
October 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

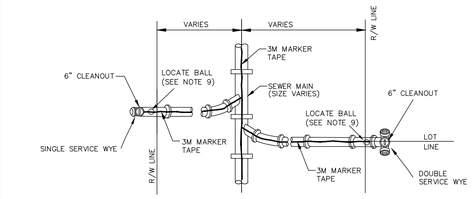
SCALE
NONE

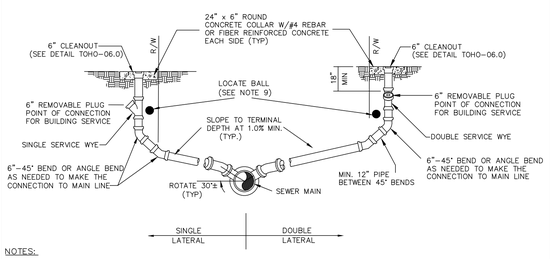
SHEET NUMBER
31

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Thomas L. Knight, PE, on October 15, 2025.

Signature must be verified on any electronic copies.





NOTES:

1. ALL RESIDENTIAL AND COMMERCIAL LATERALS SHALL BE 6".
2. THE SINGLE 6" RISER DENOTES THE END OF TOHO'S MAINTENANCE RESPONSIBILITY.
3. THE SINGLE 6" TOHO CLEANOUT SHALL BE PLACED ON THE LOT LINE AND WITHIN 24" OF THE RIGHT-OF-WAY LINE.
4. NO CLEANOUTS SHALL BE PLACED WITHIN THE RIGHT-OF-WAY OR IN A SIDEWALK OR WALKWAY.
5. LATERALS SHALL NOT EXCEED 100' FROM THE MAIN TO TOHO'S CLEANOUT.
6. LATERALS SHALL BE MARKED WITH A 3" HIGH "S" IN THE CURB OR SIDEWALK ADJACENT TO A PARKING SPACE WHERE THE LATERAL CROSSES THE CURB OR SIDEWALK. MARK SHALL BE PAINTED GREEN.
7. CONNECTIONS TO THE TOHO CLEANOUT'S VERTICAL STANDPIPE ARE NOT PERMITTED.
8. FITTINGS USED SHALL NOT EXCEED 45 DEGREES. A MINIMUM OF 12" OF PIPE IS REQUIRED BETWEEN ALL FITTINGS.
9. THE SERVICE WYE ON THE 6" VERTICAL STANDPIPE SHALL BE BETWEEN 18" AND 48" FROM FINISHED GRADE.
10. NO PLANTINGS, STRUCTURES, OR OTHER UTILITIES, INCLUDING BUT NOT LIMITED TO TELECOM PEDESTALS, ELECTRICAL TRANSFORMERS OR POLES, OR OTHER CLEANOUTS USED FOR TESTING PURPOSES SHALL BE INSTALLED WITHIN 36" OF ANY SIDE OF THE TOHO CLEANOUT.
11. PLACE TOHO APPROVED 3M MARKER TAPE FROM THE MAIN TO THE SINGLE OR DOUBLE SERVICE WYE:
    - 11.1. TAPE SHALL BE BURIED NO DEEPER THAN 4'.
    - 11.2. IF MARKER TAPE IS INSTALLED MORE THAN 18" ABOVE A LATERAL DUE TO DEPTH OF THE PIPE, ADDITIONAL TOHO APPROVED WARNING TAPE SHALL BE REQUIRED 12" – 18" ABOVE THE PIPE.
12. PROVIDE TOHO APPROVED LOCATE BALLS AT ALL SINGLE AND DOUBLE SERVICE WYES.
13. SEE SANITARY CLEANOUT DETAIL TOHO-06 FOR ADDITIONAL NOTES AND REQUIREMENTS.

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/28/2025
PREVIOUS VERSION:	2022
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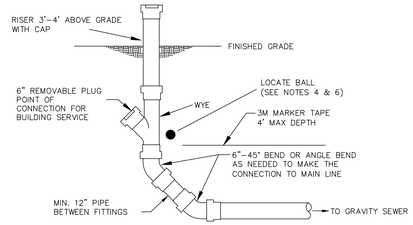
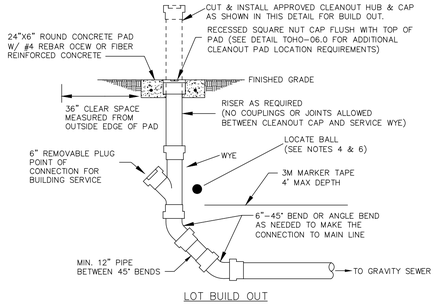
REVISED BY:	DT

SANITARY SEWER LATERAL — DRAWING NUMBER 05



UN-DEVELOPED LOT



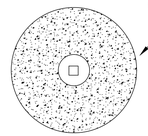
LOT BUILD OUT

NOTES:

1. SITE CONTRACTOR SHALL LEAVE THE CLEANOUT RISER 3' – 4' ABOVE FINISHED GRADE. AT LOT BUILD OUT THE RISER SHALL BE CUT AND CAPPED WITH A CLEANOUT HUB AND CAP INSTALLED IN A CONCRETE PAD SET FLUSH WITH FINISH GRADE OR IN A CAST IRON HANDHOLE IF IN A DRIVEWAY.
2. CLEANOUT CAPS SHALL HAVE A RECESSED SQUARE NUT.
3. NO PLANTINGS, STRUCTURES, OR OTHER UTILITIES, INCLUDING BUT NOT LIMITED TO TELECOM PEDESTALS, ELECTRICAL TRANSFORMERS OR POLES, OR OTHER CLEANOUTS USED FOR TESTING PURPOSES SHALL BE INSTALLED WITHIN 36" OF ANY SIDE OF THE TOHO CLEANOUT.
4. PROVIDE TOHO APPROVED LOCATE BALLS AT ALL SINGLE AND DOUBLE SERVICE WYES.
5. PLUMBER SHALL CONNECT TO SERVICE WYE WITH GASKETED PUSH FITTING ONLY. GLUE OR NON GASKETED FITTINGS SHALL NOT BE PERMITTED.
6. SEE SANITARY SEWER LATERAL DETAIL TOHO-05 AND SANITARY SEWER CLEANOUT PAD TOHO-06.1 FOR ADDITIONAL NOTES AND REQUIREMENTS.

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/28/2025
PREVIOUS VERSION:	2022
DRAWN BY:	MP
REVISED BY:	DT

SANITARY SEWER CLEANOUT — DRAWING NUMBER 06.0



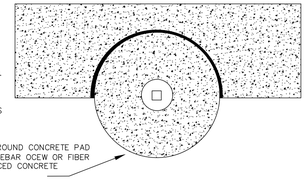
TYPICAL CLEANOUT PAD:

1. CLEANOUT HUB AND CAP INSTALLED IN A CONCRETE PAD SHALL BE FLUSH WITH TOP OF PAD.
2. CLEANOUT PAD TOP SHALL BE FLUSH WITH FINISH GRASS GRADE.
3. CLEANOUT CAPS SHALL BE SQUARE RECESSED NUT.

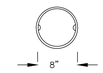
TYPICAL CLEANOUT IN PAD

CLEANOUT PAD ADJACENT TO DRIVEWAY:

1. IF MORE THAN 50% OF A CLEANOUT WILL BE LOCATED WITHIN A DRIVEWAY IT IS THE DEVELOPER'S RESPONSIBILITY TO RELOCATE THE CLEANOUT USING TOHO APPROVED CONSTRUCTION METHODS.
2. A FULL SIZE CLEANOUT PAD CENTERED OVER THE CLEANOUT SHALL BE REQUIRED.
3. PROVIDE EXPANSION JOINT MATERIAL BETWEEN THE CLEANOUT PAD AND DRIVEWAY.
4. CLEANOUT PADS ADJACENT TO DRIVEWAYS SHALL BE CENTERED BETWEEN EXPANSION JOINTS IN THE PAVEMENT.



CLEANOUT PAD ADJACENT TO DRIVEWAY



CAST IRON HANDHOLE

CAST IRON HANDHOLE:

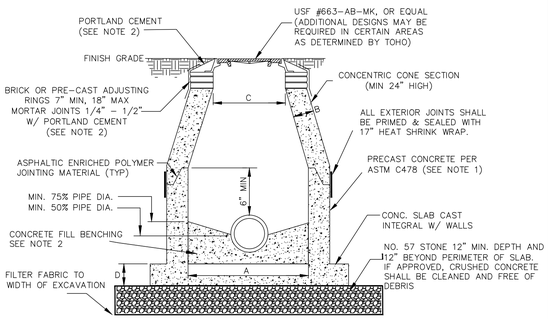
1. CLEANOUT HUB AND CAP INSTALLED IN A CAST IRON HANDHOLE SHALL BE SET 4" BELOW FINISH GRADE.
2. CAST IRON HANDHOLE TOP SHALL BE SET FLUSH WITH DRIVEWAY OR PAVER TOP GRADE.
3. CAST IRON HANDHOLE SHALL BE 8" WIDE X 8" DEEP MINIMUM

GENERAL NOTES:

1. CLEANOUTS ARE NOT PERMITTED WITHIN SIDEWALKS, ENTRY WALKS, OR ANY OTHER PAVED AREA INTENDED FOR FOOT TRAFFIC ONLY.
2. LATERALS SHALL BE MARKED WITH A 3" HIGH 'S' ON THE CURB OR SIDEWALK ADJACENT TO A PARKING SPACE WHERE THE LATERAL CROSSES THE CURB OR SIDEWALK.
3. NO PLANTINGS, STRUCTURES, OR OTHER UTILITIES, INCLUDING BUT NOT LIMITED TO TELECOM PEDESTALS, ELECTRICAL TRANSFORMERS OR POLES, METER BOXES, OR OTHER CLEANOUTS USED FOR TESTING PURPOSES SHALL BE INSTALLED WITHIN 36" OF ANY SIDE OF A TOHO CLEANOUT.
4. SEE SANITARY SEWER LATERAL DETAIL TOHO-05 AND SANITARY CLEANOUT DETAIL TOHO-06.0 FOR ADDITIONAL NOTES AND REQUIREMENTS.

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/28/2025
PREVIOUS VERSION:	NA
DRAWN BY:	DT
REVISED BY:	DT

SANITARY SEWER CLEANOUT PAD — DRAWING NUMBER 06.1



M.H. DEPTH	A*	B	C	D
UP TO 11.99'	48"	6"	36"	8"
12' – 15' *	60"	8"	36"	10"

PIPE SIZE	A*
6" – 12"	48"
14" – 24"	60"
> 24"	72"

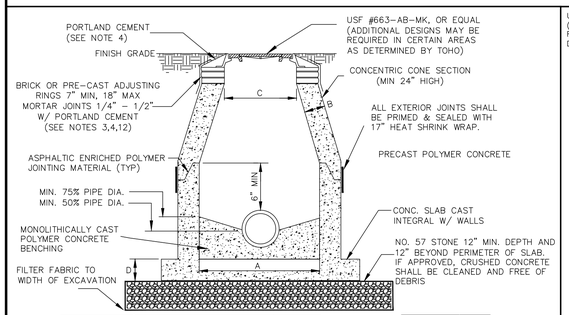
* MANHOLES 12' OR DEEPER ALLOWED ONLY ON CASE-BY-CASE BASIS WITH CEO/EXECUTIVE DIRECTOR APPROVAL

NOTES:

1. PRECAST CONCRETE SHALL BE TYPE 2 CEMENT, 4000 PSI WITH XYPEX ADMIX C-1000 RED, XYPEX XYCRYLIC ADMIX, OR APPROVED EQUAL.
2. ALL PORTLAND CEMENT, GROUT, OR CONCRETE FILL USED INSIDE OR OUTSIDE OF A NON-POLYMER MANHOLE SHALL REQUIRE XYPEX C-1000 RED, XYPEX XYCRYLIC ADMIX OR APPROVED EQUAL.
3. ALL OPENINGS, CHIPS, LIFT HOLES, ETC. SHALL BE SEALED WITH PORTLAND CEMENT WITH XYPEX ADMIX C-1000 RED, XYPEX XYCRYLIC ADMIX, OR APPROVED EQUAL.
4. LIFT HOLES ARE NOT PERMITTED THROUGH PRECAST SECTIONS.
5. REINFORCING STEEL PER ASTM C478 (MOST RECENT EDITION) SHALL BE REQUIRED.
6. MANHOLE DESIGNS MUST MAINTAIN A MINIMUM OF 50% UNINTERRUPTED WALL AREA ON ANY HORIZONTAL PLANE AND A MINIMUM OF 12" BETWEEN WALL PENETRATIONS.
7. CONCENTRIC FLAT TOP SLABS ARE ONLY ALLOWED WHERE THE DEPTH OF COVER OVER THE PIPE IS LESS THAN 48" OR WHERE OTHERWISE APPROVED BY TOHO.
8. SERVICE LATERALS SHALL BE PERMITTED DIRECTLY INTO MANHOLES MATCHING THE CROWN ELEVATION OF THE OUTFLOW PIPE ONLY. DROPS OR FILLETED FLUMES ARE NOT PERMITTED FOR LATERALS.
9. THIS DETAIL SHALL NOT APPLY TO THE FOLLOWING MANHOLES. REFERENCE THE POLYMER MANHOLE DETAIL TOHO-07.1 FOR ADDITIONAL REQUIREMENTS:
    - 9.1. MANHOLES 12' OR DEEPER.
    - 9.2. MANHOLES THAT RECEIVE FORCE MAINS.
    - 9.3. MANHOLES WITH DROP CONNECTIONS.
    - 9.4. MANHOLES WITHIN 400' UPSTREAM OR DOWNSTREAM OF 9.2 OR 9.3 ABOVE.
10. WHERE MANHOLES ARE NOT IN PAVED AREAS OR COMPLETELY PROTECTED FROM VEHICULAR TRAFFIC, A CONCRETE COLLAR PER TOHO-26 SHALL BE REQUIRED.

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/28/2025
PREVIOUS VERSION:	2022
DRAWN BY:	MP
REVISED BY:	DT

STANDARD MANHOLE — DRAWING NUMBER 07.0



M.H. DEPTH	A*	B	C	D **
UP TO 11.99'	48"	2"	36"	6"
12' – 15' *	60"	2"	36"	6"

PIPE SIZE	A*
6" – 12"	48"
14" – 24"	60"
> 24"	72"

* MANHOLES 12' OR DEEPER ALLOWED ONLY ON CASE-BY-CASE BASIS WITH CEO/EXECUTIVE DIRECTOR APPROVAL

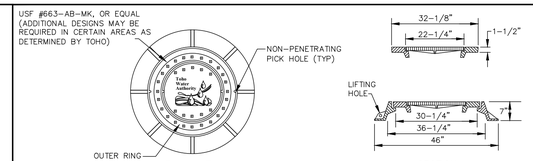
** BASE DEPTH AND REINFORCEMENT TO BE DESIGNED BY MANHOLE PRECASTER AND APPROVED BY TOHO

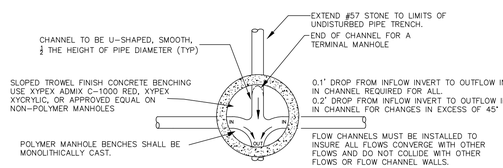
NOTES:

1. THIS DETAIL SHALL APPLY TO THE FOLLOWING MANHOLES:
    - 1.1. MANHOLES 12' OR DEEPER.
    - 1.2. MANHOLES THAT RECEIVE FORCE MAINS.
    - 1.3. MANHOLES WITH DROP CONNECTIONS.
    - 1.4. MANHOLES WITHIN 400' UPSTREAM OR DOWNSTREAM OF 10.2 OR 10.3 ABOVE.
2. PRECAST BASE, RISER(S), AND CONE SECTIONS SHALL BE POLYMER CONCRETE.
3. ALL GROUT FILL USED INSIDE A POLYMER MANHOLE SHALL BE POLYMER GROUT AS SPECIFIED BY THE MANHOLE PRECASTER.
4. ALL PORTLAND CEMENT, GROUT, OR CONRETE FILL USED OUTSIDE OF A POLYMER MANHOLE SHALL REQUIRE XYPEX ADMIX C-1000 RED, XYPEX XYCRYLIC ADMIX, OR APPROVED EQUAL.
5. ALL INTERIOR OPENINGS, CHIPS, LIFT HOLES, ETC. SHALL BE SEALED WITH POLYMER GROUT AS SPECIFIED BY THE MANHOLE PRECASTER.
6. LIFT HOLES ARE NOT PERMITTED THROUGH PRECAST SECTIONS.
7. REINFORCEMENT OF THE PRECAST BASE, RISER(S), AND CONE SHALL BE DESIGNED BY THE MANHOLE PRECASTER AND APPROVED BY TOHO.
8. MANHOLE DESIGNS MUST MAINTAIN A MINIMUM OF 50% UNINTERRUPTED WALL AREA ON ANY HORIZONTAL PLANE AND A MINIMUM OF 12" BETWEEN WALL PENETRATIONS.
9. CONCENTRIC FLAT TOP SLABS ARE ONLY ALLOWED WHERE THE DEPTH OF COVER OVER THE PIPE IS LESS THAN 48" OR WHERE OTHERWISE APPROVED BY TOHO.
10. SERVICE LATERALS SHALL BE PERMITTED DIRECTLY INTO MANHOLES MATCHING THE CROWN ELEVATION OF THE OUTFLOW PIPE ONLY. DROPS OR FILLETED FLUMES ARE NOT PERMITTED FOR LATERALS.
11. WHERE MANHOLES ARE NOT IN PAVED AREAS OR COMPLETELY PROTECTED FROM VEHICULAR TRAFFIC, A CONCRETE COLLAR PER TOHO-26 SHALL BE REQUIRED.
12. POLYMER GROUT AS SPECIFIED BY THE MANHOLE PRECASTER SHALL BE USE TO SKIM COAT THE INTERIOR SURFACE OF THE BRICK RISER / ADJUSTMENT RING(S).

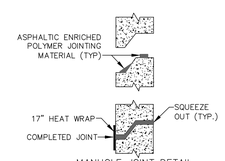
EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/28/2025
PREVIOUS VERSION:	NA
DRAWN BY:	DT
REVISED BY:	DT

POLYMER MANHOLE — DRAWING NUMBER 07.1

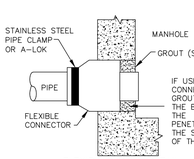




MANHOLE FLOW CHANNEL



MANHOLE JOINT DETAIL



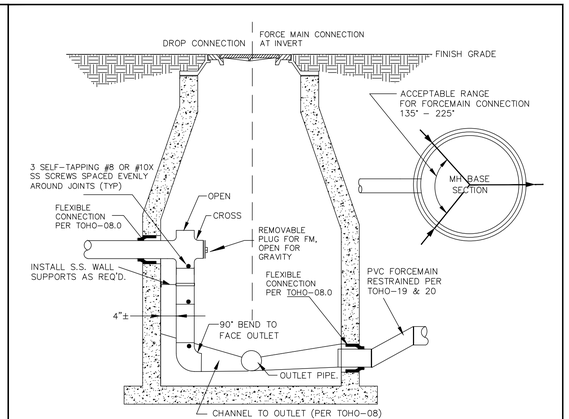
FLEXIBLE CONN. DETAIL

NOTES:

1. ALL EXTERIOR JOINTS SHALL BE CLEANED, PRIMED, DRIED, AND SEALED WITH 17" HEAT SHRINK WRAP.
2. EXCESS JOINT COMPOUND SHALL BE TRIMMED FROM INTERIOR WALLS.
3. ALL PORTLAND CEMENT, GROUT, OR CONCRETE FILL USED INSIDE NON-POLYMER MANHOLES OR OUTSIDE OF NON-POLYMER AND POLYMER MANHOLES SHALL REQUIRE XYPEX C-1000 RED, XYPEX XYCRYLIC ADMIX OR APPROVED EQUAL.
4. ALL CEMENT, GROUT, OR CONCRETE FILL USED INSIDE POLYMER MANHOLES SHALL REQUIRE POLYMER GROUT AS SPECIFIED BY THE MANHOLE PRECASTER.
5. CONCENTRIC FLAT TOP SLABS ARE ONLY ALLOWED WHERE THE DEPTH OF COVER OVER THE PIPE IS LESS THAN 48" OR WHERE OTHERWISE APPROVED BY TOHO.
6. CONNECTIONS TO BRICK MANHOLES SHALL BE COMPLETED UTILIZING SDR35 OR SDR26 SAND COLLAR(S) AND 4,000PSI CONCRETE WITH XYPEX C-1000 RED, XYCRYLIC ADMIX OR APPROVED EQUAL.

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/28/2025
PREVIOUS VERSION:	2022
DRAWN BY:	MP
REVISED BY:	DT

MISCELLANEOUS MANHOLE — DRAWING NUMBER 08.0



Notes:

1. WHEN PROVIDING A DROP OR FORCE MAIN CONNECTION TO AN EXISTING MANHOLE, REFER TO STANDARD MANHOLE DETAIL TOHO-07.0 AND MISCELLANEOUS MANHOLE DETAIL TOHO-08.0 FOR ADDITIONAL REQUIREMENTS.
2. WHEN PROVIDING A DROP OR FORCE MAIN CONNECTION TO A NEW MANHOLE, REFER TO POLYMER MANHOLE DETAIL TOHO-07.1, AND MISCELLANEOUS MANHOLE DETAIL TOHO-08.0 FOR ADDITIONAL REQUIREMENTS.
3. MANHOLE SHALL BE 60" DIAMETER MINIMUM.
4. PIPING LARGER THAN 12" SHALL HAVE EXTERIOR DROP CONNECTION DESIGNED BY AN ENGINEER AND APPROVED BY TOHO.
5. EACH SECTION OF INTERIOR DROP PIPING SHALL HAVE NO LESS THAN 2 SUPPORTS SPACED NO FURTHER APART THAN 8'.
6. INTERIOR DROP PIPING SHALL BE GASKETED BELL AND SPIGOT MATCHING THE INCOMING PIPE SIZE AND DIMENSION RATIO.
7. ALL NEW MANHOLES WITH A DROP OR FORCE MAIN CONNECTION AND/OR ALL NEW MANHOLES THAT ARE WITHIN 400' UPSTREAM AND DOWNSTREAM OF A NEW OR EXISTING DROP OR FORCE MAIN CONNECTION SHALL REQUIRE POLYMER MANHOLES PER DETAIL TOHO-07.1.
8. ALL EXISTING MANHOLES THAT RECEIVE A NEW DROP CONNECTION OR FORCE MAIN CONNECTION OR EXISTING MANHOLES WITHIN 400' UPSTREAM AND DOWNSTREAM OF A NEW MANHOLE WITH A DROP OR FORCE MAIN CONNECTION SHALL REQUIRE A TOHO APPROVED SPRAY ON OR TROWEL ON LINER.
9. FORCE MAIN CONNECTIONS SHALL BE ALLOWED AT EFFLUENT INVERT ELEVATION +0.1' AND FROM 135 TO 225 DEGREES FROM THE EFFLUENT OUTLET.
10. DROP FORCE MAIN CONNECTIONS SHALL BE APPROVED BY TOHO ON A CASE-BY-CASE BASIS.

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/28/2025
PREVIOUS VERSION:	2022
DRAWN BY:	MP
REVISED BY:	DT

DROP OR FORCE MAIN CONNECTION TO MANHOLE — DRAWING NUMBER 09

REVISION	DATE
Revised per St. Cloud comments dated Sep. 5, 2025	Oct. 2025

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES
SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

TOHO WATER AUTHORITY
SEWER DETAILS

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
October 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
NONE

SHEET NUMBER
32

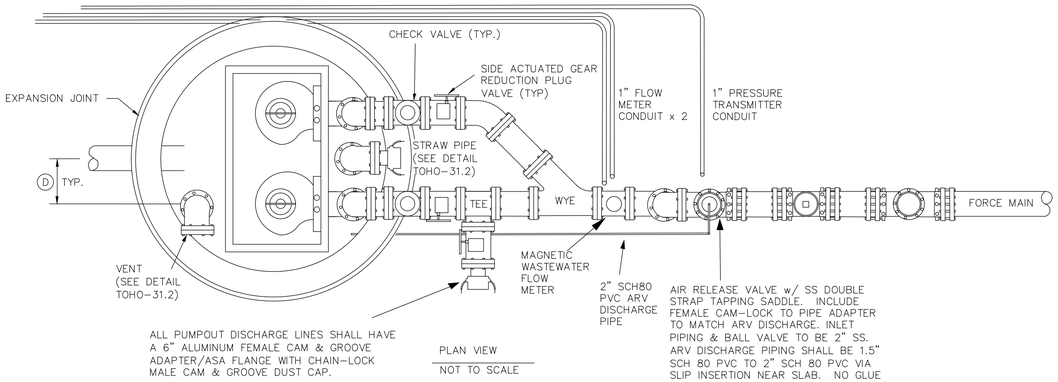
THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Thomas L. Knight, PE, on October 15, 2025.

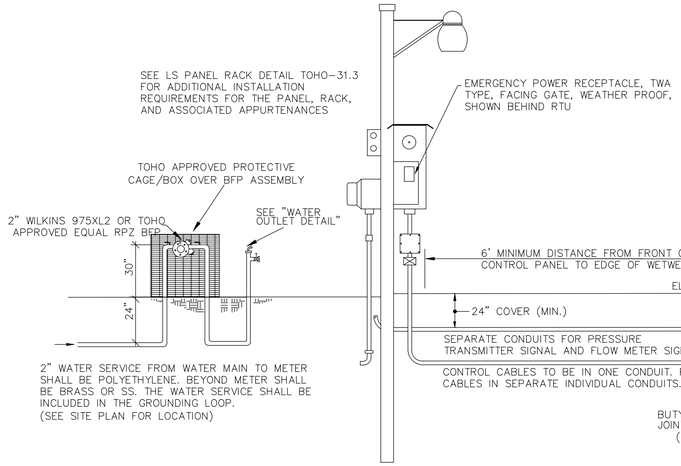
Signature must be verified on any electronic copies.

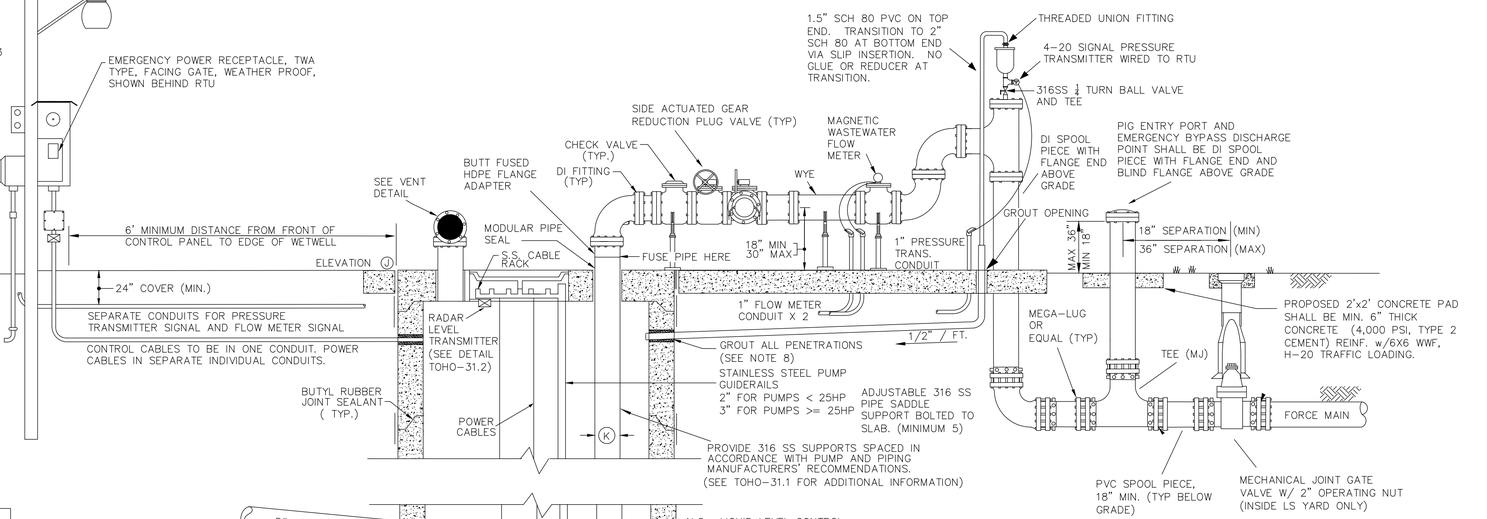
GENERAL NOTES:

1. ALL ITEMS NOT SPECIFIED ON THESE DETAIL SHEETS SHALL MEET CURRENT TOHO STANDARDS AND SPECIFICATIONS.
2. ALL LIFT STATION WET WELLS SHALL BE PRECAST POLYMER CONCRETE.
3. NO LIFTING HOLES ARE PERMITTED THRU WALLS OR TOP SLAB.
4. ALL ABOVE GROUND FORCE MAIN PIPING SHALL BE FLANGED DUCTILE IRON.
5. SPOOL PIECES ABOVE GRADE SHALL BE FLANGED DUCTILE IRON.
   5.1. PROVIDE AN 18" SPOOL PIECE UPSTREAM OF EACH CHECK VALVE.
   5.2. THE NUMBER AND LENGTH OF SPOOL PIECES DOWNSTREAM OF THE CHECK VALVE SHALL BE KEPT TO A MINIMUM AND USED ONLY AS NECESSARY TO ACHIEVE PROPER ALIGNMENT OF THE ASSEMBLY.
6. ALL CONDUIT SHALL BE RIGID ALUMINUM EXCEPT FOR THE CONDUIT FROM THE TRANSFORMER TO THE 2ND DISCONNECT AFTER THE METER.
7. FINISHED GRADE INSIDE THE FENCED AREA SHALL BE A MINIMUM OF 12" ABOVE THE 100 YEAR FLOOD AND 6" ABOVE THE GROUND ELEVATION OF THE HEIGHEST FENCE POST.
8. ALL PENETRATIONS, INTERIOR OPENINGS, CHIPS, LIFT HOLES, ETC. SHALL BE SEALED WITH POLYMER GROUT AS SPECIFIED BY THE MANHOLE PRECASTER.
9. SEE PANEL DRAWING(S) FOR TELEMETRY SYSTEM DETAILS.
10. TELEMETRY SHALL BE PAID FOR BY THE DEVELOPER AND FURNISHED, INSTALLED, AND PROGRAMMED BY TOHO.
11. THE CELLULAR ANTENNA WILL BE PROVIDED AND INSTALLED BY TOHO.
12. ALL ENCLOSURE PENETRATIONS SHALL BE MADE ON THE BOTTOM OF THE ENCLOSURE. TOP AND SIDE PENETRATIONS ARE NOT PERMITTED EXCEPT ON TVSS. USE MYERS HUBS EXCEPT BETWEEN METER AND DISCONNECT AND TVSS.
13. ALL BOXES AND ENCLOSURES SHALL BE NEMA 4X 316 STAINLESS STEEL.
    13.1. METER CAN SHALL BE PER UTILITY COMPANY.
14. RACK TO UTILIZE 316 STAINLESS STEEL STRUT CHANNEL AND HARDWARE WITH VINYL ENDCAPS.
15. ALL BOLTS AND WASHERS INSIDE THE WET WELL SHALL BE 316 SS.
16. ALL NUTS INSIDE THE WET WELL SHALL BE 316 SS LOCK NUTS.
17. ABOVE GROUND SHUT-OFF VALVES SHALL BE FLANGE END SIDE ACTUATED GEAR REDUCTION PLUG VALVES.
18. PRESSURE TRANSMITTER AND FLOW TRANSMITTER CABLES SHALL ENTER IN-GROUND CONDUIT VIA WEATHERHEAD SERVICE CAP.
19. IN-GROUND VALVES SHALL BE MECHANICAL JOINT END PLUG VALVES WITH 2" OPERATING NUT.



PLAN VIEW
NOT TO SCALE



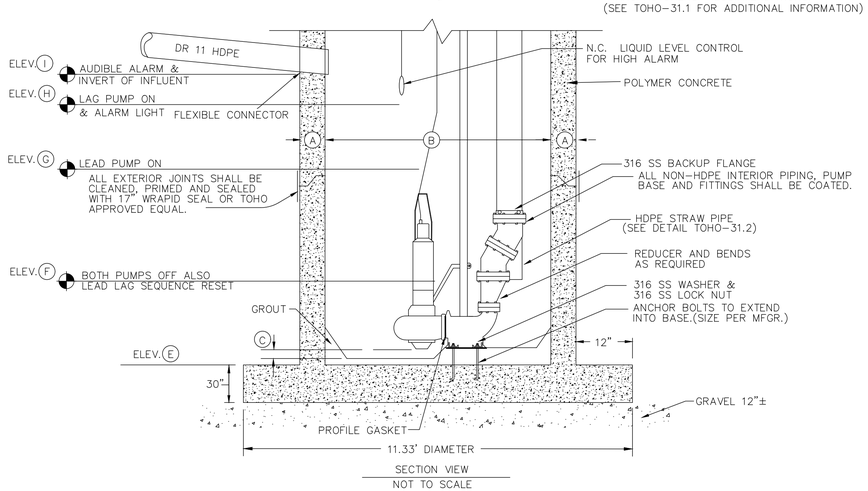


MARK	DIMENSIONS	DESCRIPTION	COMMENTS
DIM. A	8"	WETWELL WALL THICKNESS	PER PRECASTER SPECIFICATIONS
DIM. B	8'	WETWELL DIAMETER	8' MINIMUM
DIM. C	4"	PER PUMP SUBMITTAL DATA	
DIM. D	13"	DISTANCE BETWEEN CENTER OF INVERT AND CENTER OF PUMP	INFLOW SHALL NOT LAND ON ANY PORTION OF A PUMP INSIDE THE WELL
DIM. E	62.40	ELEVATION	BOTTOM OF WETWELL
DIM. F	64.74	ELEVATION	PUMPS OFF
DIM. G	66.74	ELEVATION	LEAD PUMP ON
DIM. H	67.24	ELEVATION	LAG PUMP ON
DIM. I	67.74	ELEVATION	AUDIBLE ALARM & INVERT
DIM. J	80.00	ELEVATION	TOP OF SLAB
DIM. K	4"	HDPE DR11 DIAMETER	DISCHARGE
DIM. L	17.60'	*EQUAL TO DEPTH OF WETWELL.*	*15' MIN W/ NO ODOR CONTROL 20' MIN W/ ODOR CONTROL REQ'D*
FLOOD ZONE DESIGNATION		FLOOD ELEV.	VERT DATUM "NAVD"

PUMP MANUFACTURER: KSB *MODEL:* ARX D-MAX 100-180/0-36F4YSG2 *HP:* 5

IMPELLER: 6.625" 115 *GPM at* 35 ft *TDH*

SPEED: 1703 RPM *ELECTRICAL:* 460V, 3 PHASE



SECTION VIEW
NOT TO SCALE

THIS DETAIL IS NOT INTENDED TO ENCOMPASS ALL CONSTRUCTION DETAILS FOR LIFT STATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REFER TO ALL OF TOHO'S LS DETAILS AS WELL AS THE STANDARDS AND SPECIFICATIONS MANUAL.

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Thomas L. Knight, PE, on October 15, 2025.

Signature must be verified on any electronic copies.

DRAWING NUMBER
31.0

REVISION

DATE	REVISION
Oct. 2025	Revised per St. Cloud comments dated Sep. 5, 2025

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

STANDARD LIFT STATION DETAIL

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

TOHO WATER AUTHORITY LIFT STATION DETAILS

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/22/2025
PREVIOUS VERSION:	2022
DRAWN BY:	MP
REVISED BY:	DT

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
October 2025

DRAWN BY
TLK/JMK

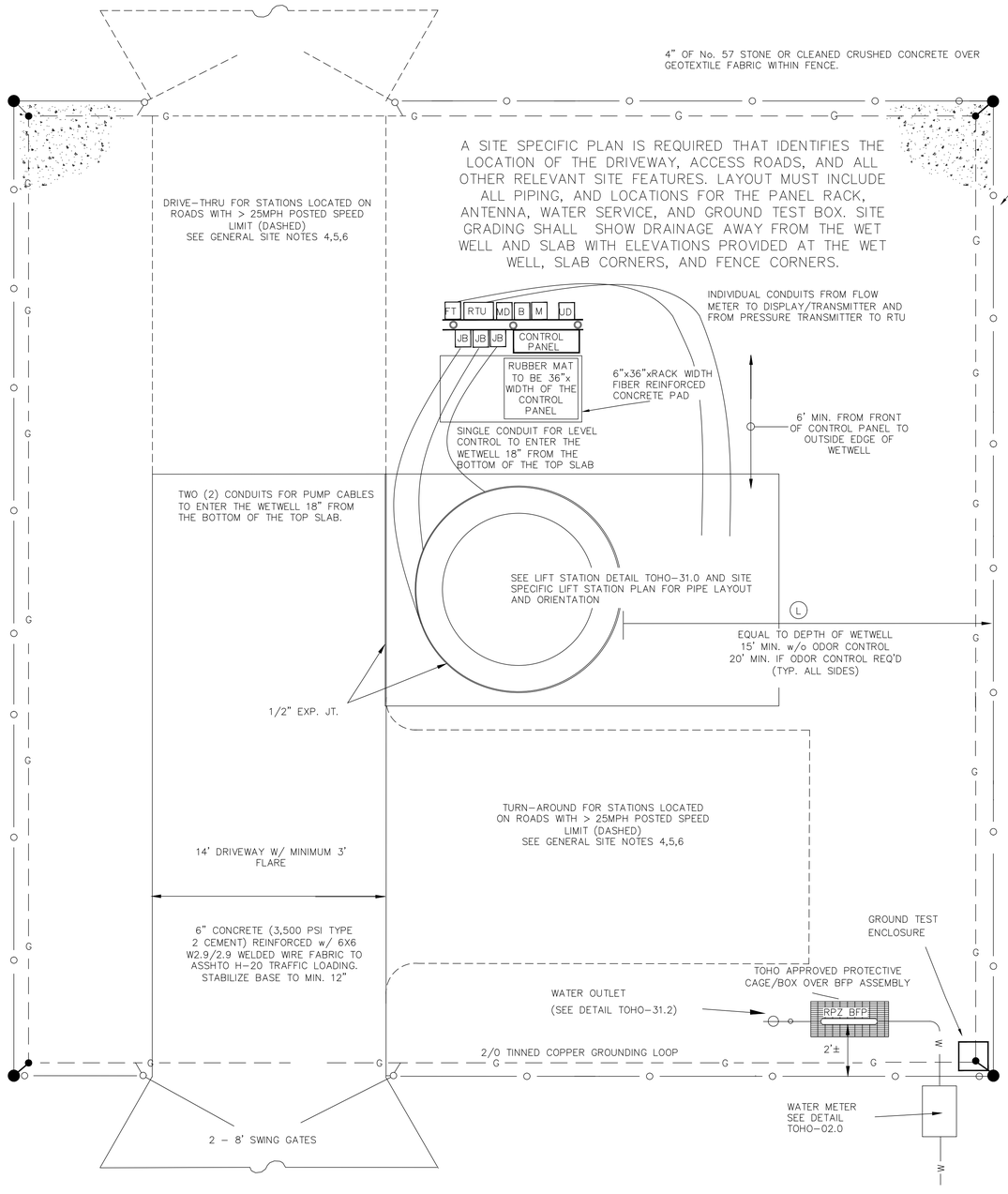
PROJECT NUMBER
23-12

SCALE
NONE

SHEET NUMBER
33

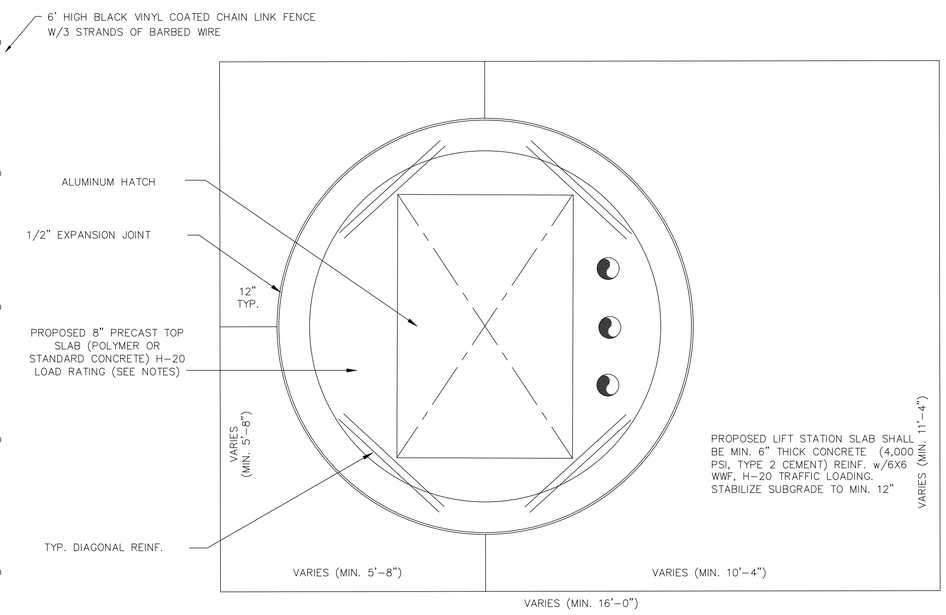
Toho Water Authority

THIS DETAIL IS NOT INTENDED TO ENCOMPASS ALL CONSTRUCTION DETAILS FOR LIFT STATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REFER TO ALL OF TOHO'S LIFT STATION DETAILS AS WELL AS TOHO'S STANDARDS AND SPECIFICATIONS MANUAL.



YARD PLAN

NOT TO SCALE



TYPICAL LIFT STATION SLAB DETAIL

NOT TO SCALE

LIFT STATION SLAB NOTES:

1. SAWCUT 2" DEEP JOINT AS SHOWN. SAW CUTTING TO BE PERFORMED IMMEDIATELY AFTER PLACEMENT, AS SOON AS CONCNRETE IS FIRM ENOUGH TO SUPPORT THE SAW AND NOT BE TORN OR DAMAGED BY THE BLADE.
2. PROVIDE SAWCUTS EVERY 12' IN LENGTH AND WIDTH OF ACCESS DRIVEWAY AND LIFT STATION SLAB AS SHOWN.
3. SEE CIVIL DRAWINGS FOR SLAB LOCATION AND DIMENSIONS.
4. TOP SHLAB SHALL BE POLYMER OR STANDARD CONCRETE, ALL OTHER WET WELL CONCRETE SECTIONS SHALL BE POLYMER ONLY.

HATCH NOTES:

1. ALUMINUM ACCESS HATCH SHALL BE HALLIDAY SERIES W2S OR APPROVED EQUAL WITH ALUMINUM FALL PROTECTION GRATING.
2. HATCH SHALL INCLUDE SLAMLOCK, SPRING ASSIST AND EPDM GASKET CUSHION.
3. LIFT HANDLE SHALL BE LOCATED OPPOSITE OF ABOVE GROUND PIPING AND HATCH SHALL OPEN TOWARDS PIPING.

GENERAL SITE NOTES:

1. YARD PIPING PLAN IS A GENERIC PLAN SHOWING REQUIRED PIPING AND MINIMUM CLEARANCES, SEPARATIONS, AND SITE SIZING REQUIREMENTS
2. A LAYOUT DEVIATING FROM THIS DETAIL SHALL BE DRAWN TO SCALE AND SHOW WETWELL PUMPS AND INFLUENT AND EFFLUENT PIPING TO ENSURE SUFFICIENT SPACE WITHIN THE WETWELL TO ACCOMODATE ALL MECHANICAL EQUIPMENT AND PIPING
3. ELECTRICAL TRANSFORMERS MUST BE LOCATED OUTSIDE OF THE FENCED AREA
4. PROPOSED 14' DRIVEWAY W/ MINIMUM 3' FLARE MUST EXTEND TO A PAVED PUBLIC OR PRIVATE ROADWAY
5. LIFT STATION SITES LOCATED ON ROADS WITH POSTED SPEED LIMITS OF 25MPH OR GREATER REQUIRE DRIVE-THRU OR TURNAROUND ACCESS
6. ENGINEER SHALL PROVIDE A TRANSOFT AUTO-TURN OR AUTODESK VEHICLE TRACKING ANALYSIS FOR A COMBINATION SEWER CLEANING VACTOR TRUCK

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

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DRAWING NUMBER 31.1

MISCELLANEOUS LIFT STATION DETAILS - I

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/22/2025
PREVIOUS VERSION:	2022
DRAWN BY:	MP
REVISED BY:	DT

REVISION	DATE
Revised per St. Cloud comments dated Sep. 5, 2025	Oct. 2025

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

TOHO WATER AUTHORITY LIFT STATION DETAILS

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
October 2025

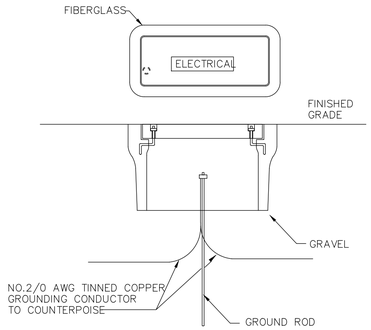
DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
NONE

SHEET NUMBER
34

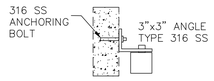
Toho Water Authority



GROUND TEST ENCLOSURE

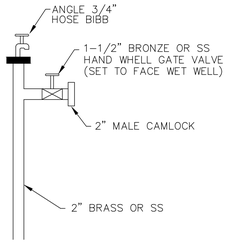
GROUNDING NOTES:

1. CONNECTIONS TO THE COUNTERPOISE LOOP SHALL BE CADWELDED TO THE GROUND ROD(S) AND ALL WIRE PIGTAILS.
2. CONNECTIONS TO THE COUNTERPOISE LOOP FOR THE FOLLOWING SHALL BE MECHANICALLY BONDED:
   - CORNER POSTS
   - GATE POSTS, GATE AND FENCE
   - WATER SERVICE
   - CONTROL PANEL
   - WET WELL HATCH AND HANDRAIL
   - DISCHARGE PIPING
   - ALL METAL CONDUIT ENTRIES INTO CONTROL PANEL BY MEANS OF GROUNDING BUSHINGS.
   - MAIN DISCONNECT SWITCH
   - UTILITY COMPANY TRANSFORMER
   - GENERATOR
   - ODOR CONTROL
   - SERVICE DISCONNECT SWITCH
   - TELEMETRY PANEL



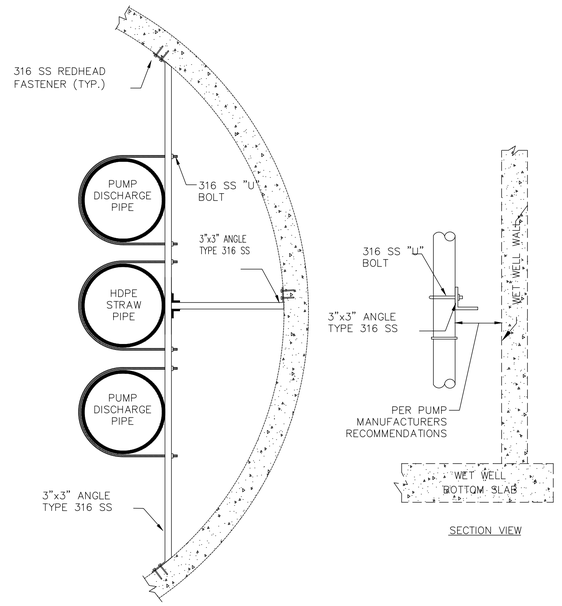
LEVEL TRANSMITTER MOUNTING

NOT TO SCALE



WATER OUTLET DETAIL

NOT TO SCALE



SECTION VIEW

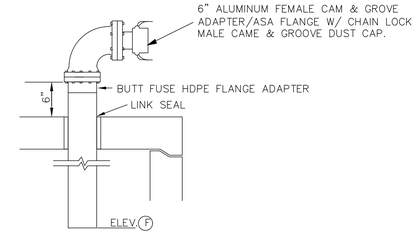
TOP VIEW

NOTES:

1. ALL COMPONENTS AND BRACKET ASSEMBLIES INSIDE THE WET WELL SHALL BE 316 STAINLESS STEEL.
2. BRACKETS SHALL BE SPACED AS INDICATED IN THE APPROVED CONSTRUCTION DRAWINGS OR AT THE DIRECTION OF TOHO.
3. PIPE SIZES AND MATERIALS SHALL BE AS INDICATED IN THE APPROVED CONSTRUCTION DRAWINGS.
4. A MINIMUM OF WALL SUPPORT BRACKETS ARE REQUIRED WITH A MAX VERTICAL SPACING OF 10'.
5. WELD ALL CONNECTIONS EXCEPT U-BOLTS.

PIPE FASTENING BRACKET

NOT TO SCALE

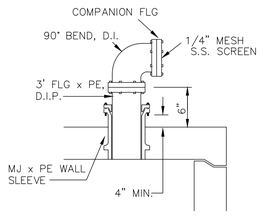


NOTES:

1. STRAW PIPE SHALL BE SIZED TO MATCH PUMP DISCHARGE PIPING.
2. SUPPORTS SHALL BE PROVIDED TO MATCH PUMP DISCHARGE PIPING REQUIREMENTS.
3. BOTTOM ELEVATION OF STRAW PIPE TO MATCH ELEVATION 'F' FROM LIFT STATION DETAIL TOHO-31.0

STRAW PIPE DETAIL

NOT TO SCALE



NOTE: SIZE VENT DIAMETER SAME AS DISCHARGE PIPING. LENGTH = SLAB THICKNESS PLUS 4"MIN.

VENT DETAIL

NOT TO SCALE

THIS DETAIL IS NOT INTENDED TO ENCOMPASS ALL CONSTRUCTION DETAILS FOR LIFT STATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REFER TO ALL OF TOHO'S LIFT STATION DETAILS AS WELL AS TOHO'S STANDARDS AND SPECIFICATIONS MANUAL.

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

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DRAWING NUMBER 31.2

MISCELLANEOUS LIFT STATION DETAILS - II

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/22/2025
PREVIOUS VERSION:	2022
DRAWN BY:	MP
REVISED BY:	DT

Toho Water Authority

REVISION	DATE
Revised per St. Cloud comments dated Sep. 5, 2025	Oct. 2025

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OLD HICKORY TREE ESTATES

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OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

TOHO WATER AUTHORITY LIFT STATION DETAILS

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
October 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
NONE

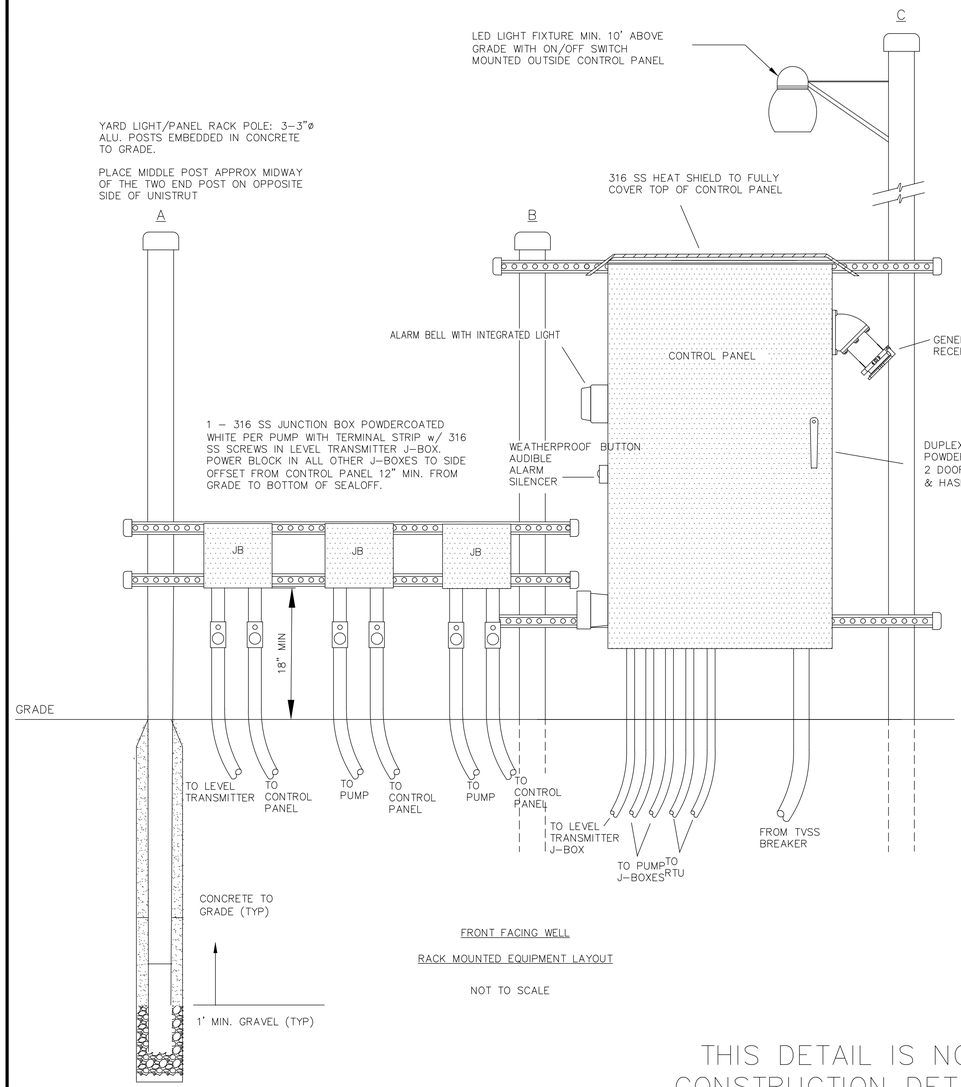
SHEET NUMBER
35

PANEL RACK NOTES:

1. CONTROL PANEL, RTU ENCLOSURE, AND JUNCTION BOXES SHALL BE 316SS POWDERCOATED WHITE
2. ALL CONDUIT SHALL BE SIZED TO ACCOMMODATE NO MORE THAN 40% CONDUIT FILL.
3. MINIMUM CONDUIT SIZE TO BE 1".
4. ALL SEAL OFFS SHALL BE TYPE EYSR.
5. ALL OPEN CONDUITS SHALL REQUIRE WEATHERHEAD INLETS.
6. ID PLATE ON ELECTRIC METER SHALL INCLUDE THE STATION NAME, TOHO DESIGNATED LS NUMBER, AND ADDRESS PERMANENTLY AFFIXED TO THE FRONT OF THE METER CABINET.
7. ALL HARDWARE INCLUDING BUT NOT LIMITED TO NUTS, BOLTS, WASHERS, STRUTS, ETC. SHALL BE 316 STAINLESS STEEL.
8. ALL PENETRATIONS SHALL BE THRU BOTTOM OF PANEL/ENCLOSURE/BOX

POWER SUPPLY NOTES:

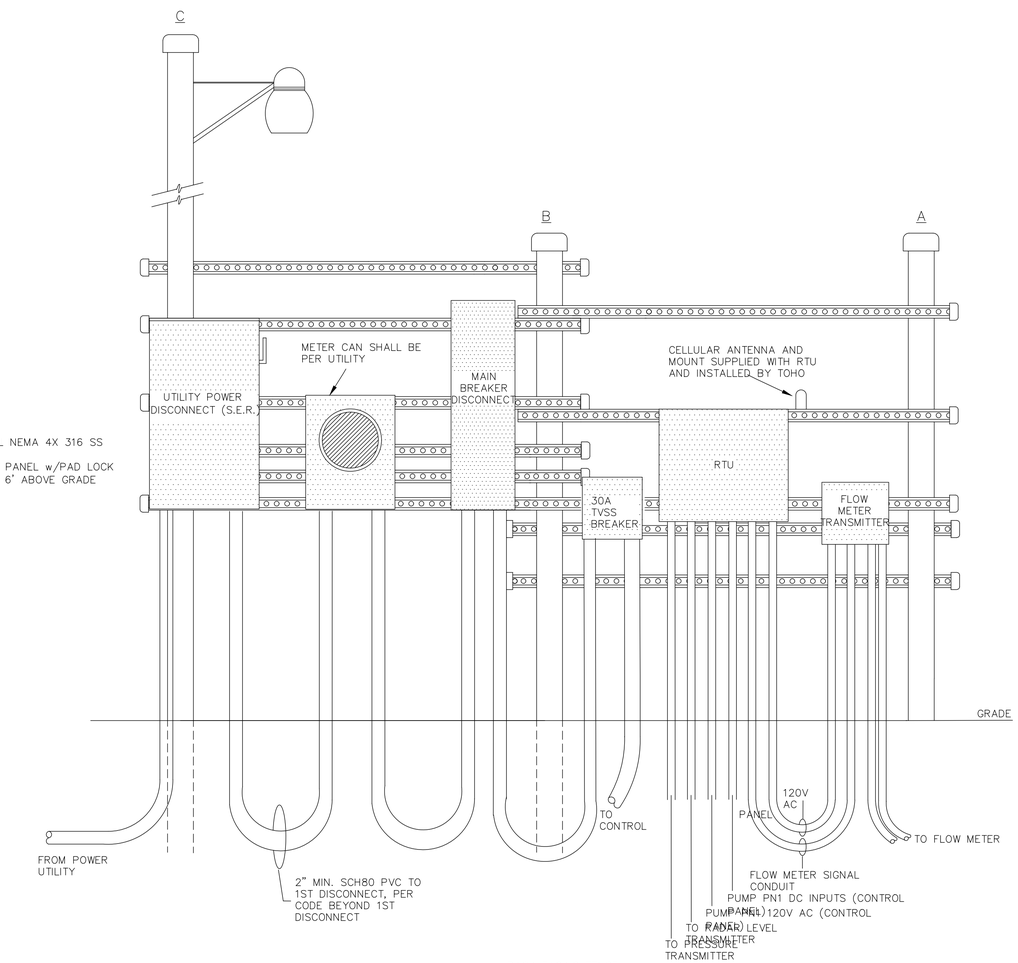
1. 480V POWER SUPPLY SHALL BE UNDERGROUND ON THE LIFT STATION SITE AND SHALL BE 3-PHASE, 4-WIRE (WYE) FROM A 3-PHASE SOURCE ONLY, 100 AMP SERVICE MINIMUM.



FRONT FACING WELL

RACK MOUNTED EQUIPMENT LAYOUT

NOT TO SCALE



BACK FACING FENCE

RACK MOUNTED EQUIPMENT LAYOUT

NOT TO SCALE

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DRAWING NUMBER
31.3

LIFT STATION PANEL RACK

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/22/2025
PREVIOUS VERSION:	2022
DRAWN BY:	MP
REVISED BY:	DT

Toho Water Authority

DATE	REVISION
Oct. 2025	Revised per St. Cloud comments dated Sep. 5, 2025

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OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

TOHO WATER AUTHORITY
LIFT STATION DETAILS

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
October 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
NONE

SHEET NUMBER
36

Nonintrinsically safe wiring terminals

TERMINAL STRIP B (TS–B)

1	2	3	4	5	6	7	8	9	10	11	12

FR1

SPARES

HIGH (N.C)

RADAR LEVEL TRANSMITTER
4–20 mA

CONTROL JUNCTION BOX

Nonintrinsically safe wiring terminals

TB1

T1	T2	T3

PUMP 1

TERMINAL STRIP C (TS–C)

1	2	3	4

THER MALS

MOISTURE 1

PUMP 1 JUNCTION BOX

TB2

T1	T2	T3

PUMP 2

TERMINAL STRIP C (TS–C)

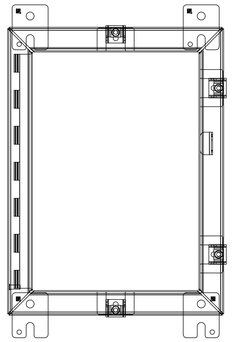
1	2	3	4

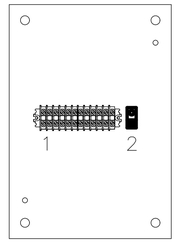
THER MALS

MOISTURE 1

PUMP 2 JUNCTION BOX

CONTROL JUNCTION BOX





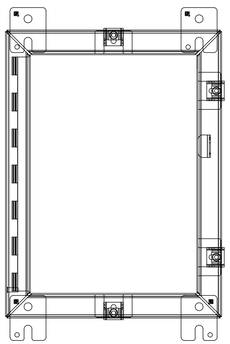
LAYOUT MAY VARY

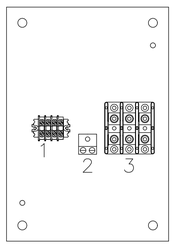
OUTER DOOR SHOWN – NO DEADFRONT

1 – TS TERMINAL STRIP
2 – GROUND

PUMP 1 & 2 JUNCTION BOXES

(TYPICAL OF 2)





LAYOUT MAY VARY

1 – TS–C TERMINAL STRIP
2 – GROUND
OUTER DOOR SHOWN – NO DEADFRONT
3 – TB1–2 – PUMP TERMINAL BLOCKS 1–2

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DRAWING NUMBER
31.4

LIFT STATION JUNCTION BOXES

REVISION	DATE
Revised per St. Cloud comments dated Sep. 5, 2025	Oct. 2025

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OLD HICKORY TREE ESTATES

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OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

TOHO WATER AUTHORITY LIFT STATION DETAILS

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/22/2025
PREVIOUS VERSION:	NA
DRAWN BY:	STA–CON
REVISED BY:	DT

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
October 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
NONE

SHEET NUMBER
37

Toho Water Authority

THIS PAGE INTENTIONALLY LEFT BLANK PLEASE CONTACT TOHO WATER AUTHORITY FOR CONTROL PANEL DRAWING PACKAGE.

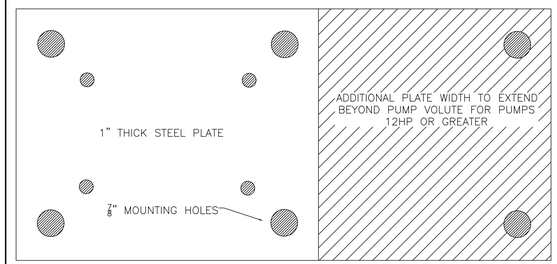
EFFECTIVE DATE:	04/01/2025	LIFT STATION CONTROL PANEL	DRAWING 31.5
BOARD APPROVED DATE:	01/22/2025		
PREVIOUS VERSION:	NA		
DRAWN BY:	DT		
REVISED BY:	DT		

THIS PAGE INTENTIONALLY LEFT BLANK PLEASE CONTACT TOHO WATER AUTHORITY FOR CONTROL PANEL SCHEMATIC DRAWING PACKAGE.

EFFECTIVE DATE:	04/01/2025	LIFT STATION CONTROL PANEL SCHEMATIC	DRAWING 31.6
BOARD APPROVED DATE:	01/22/2025		
PREVIOUS VERSION:	NA		
DRAWN BY:	DT		
REVISED BY:	DT		

THIS PAGE INTENTIONALLY LEFT BLANK PLEASE CONTACT TOHO WATER AUTHORITY FOR RTU SCHEMATIC DRAWING PACKAGE.

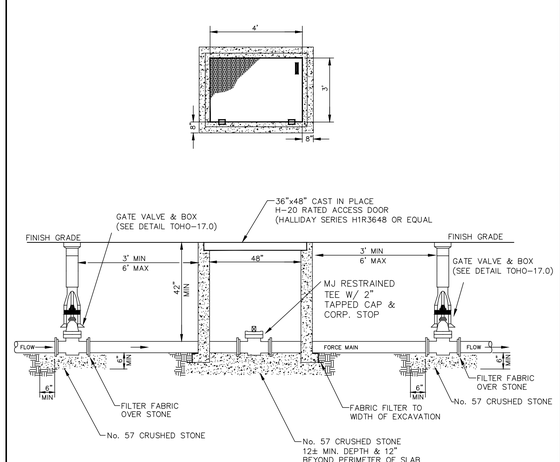
EFFECTIVE DATE:	04/01/2025	LIFT STATION RTU SCHEMATIC	DRAWING 31.7
BOARD APPROVED DATE:	01/22/2025		
PREVIOUS VERSION:	NA		
DRAWN BY:	DT		
REVISED BY:	DT		



NOTES:

1. 3/4" SS MOUNTING BOLTS TO BE SET IN LIFT STATION BASE WITH TOHO APPROVED EPOXY, EXPANDABLE ANCHORS NOT PERMITTED.
   1.1. MINIMUM EMBEDMENT OF ANCHOR SHALL BE PER WETWELL PRECASTER AND PUMP MANUFACTURER REQUIREMENTS.
   1.2. EMBEDMENT SHALL BE MEASURED FROM TOP OF PRECAST SLAB, ADDITIONAL DEPTH SHALL BE REQUIRED THROUGH GROUT USED TO SLOPE WETWELL FLOOR.
2. PUMP BASES SHALL BE MOUNTED WITH STAINLESS STEEL WASHERS AND STAINLESS STEEL NYLON LOCK NUTS.
3. THIS DRAWING IS INTENDED AS A MINIMUM DESIGN STANDARD. MEASUREMENTS MAY BE ADJUSTED DEPENDING ON PUMP BASE SIZE & WEIGHT.
4. ENGINEER OF RECORD IS RESPONSIBLE FOR SUBMITTING A PROJECT SPECIFIC BASE PLATE THAT CONFORMS TO THIS DETAIL AND ACCOMMODATES THE TOHO APPROVED PUMP FOR THE PROJECT.
5. ADDITIONAL REQUIREMENTS NOT OUTLINED IN TOHO DETAILS OR IN TOHO'S STANDARDS AND SPECIFICATIONS SHALL REQUIRE REVIEW AND APPROVAL BY TOHO PRIOR TO INSTALLATION.

EFFECTIVE DATE:	04/01/2025	LIFT STATION PUMP BASE PLATE	DRAWING 32
BOARD APPROVED DATE:	01/22/2025		
PREVIOUS VERSION:	NA		
DRAWN BY:	DT		
REVISED BY:	DT		



NOTES:

1. THIS DETAIL APPLIES TO BOTH ENTRY AND EXIT PORTS.
2. THIS DETAIL DOES NOT APPLY TO LIFT STATION PIG PORT / EMERGENCY BYPASS DISCHARGE PORT.
3. CRUSHED STONE BEDDING 6" MINIMUM BELOW VALVE AND VAULT SHALL BE COVERED WITH FILTER FABRIC.
4. NO PLANTINGS, STRUCTURES, OR OTHER UTILITIES INCLUDING BUT NOT LIMITED TO TELECOM PEDESTALS, ELECTRICAL TRANSFORMERS OR POLES, ETC. SHALL BE INSTALLED WITHIN 36" OF ANY SIDE OF THE GATE VAVLES OR VAULT.

EFFECTIVE DATE:	04/01/2025	PIG PORT	DRAWING 33
BOARD APPROVED DATE:	01/22/2025		
PREVIOUS VERSION:	2022		
DRAWN BY:	MP		
REVISED BY:	DT		

REVISION	DATE
Revised per TWA comments dated Feb. 2025	Mar. 2025
Revised per St. Cloud comments dated Sep. 5, 2025	Oct. 2025

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OLD HICKORY TREE ESTATES

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OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

TOHO WATER AUTHORITY LIFT STATION DETAILS

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

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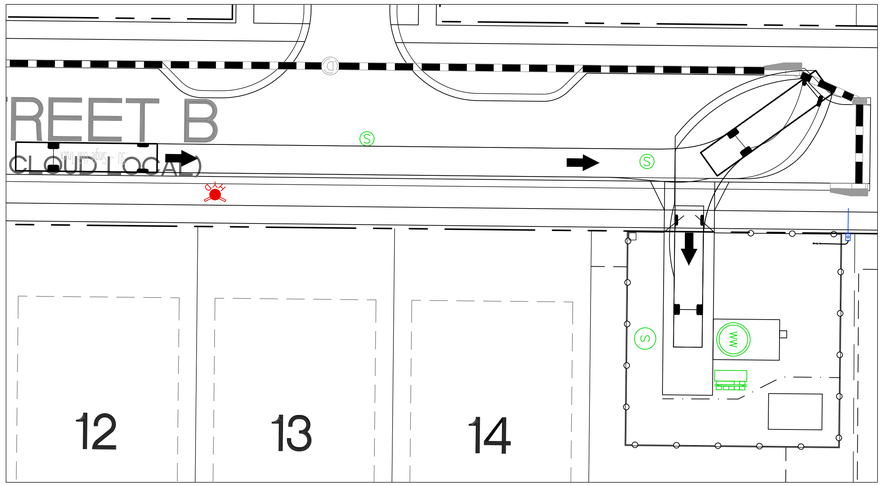
DATE
October 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
NONE

SHEET NUMBER
38

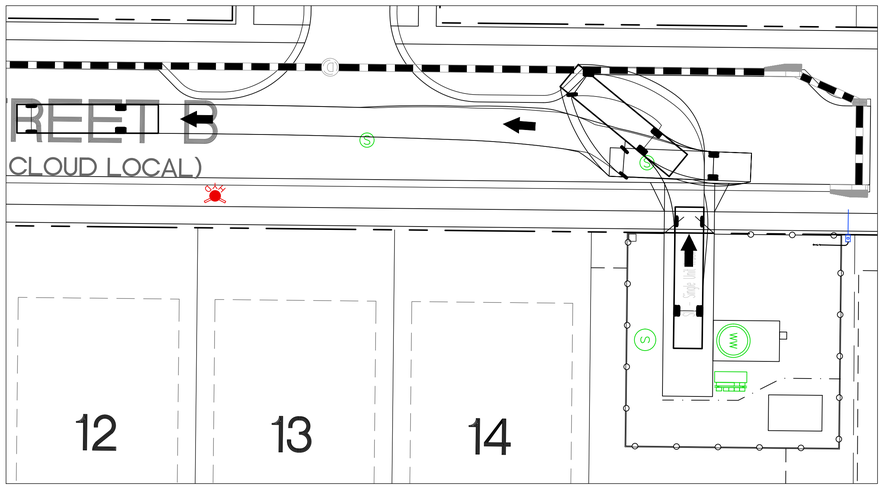


TRACT F – LIFT STATION YARD AUTO-TURN EXHIBIT 1 (ENTRY)

SCALE 1"=20'

-20 0 10 20

1 inch = 20 ft.

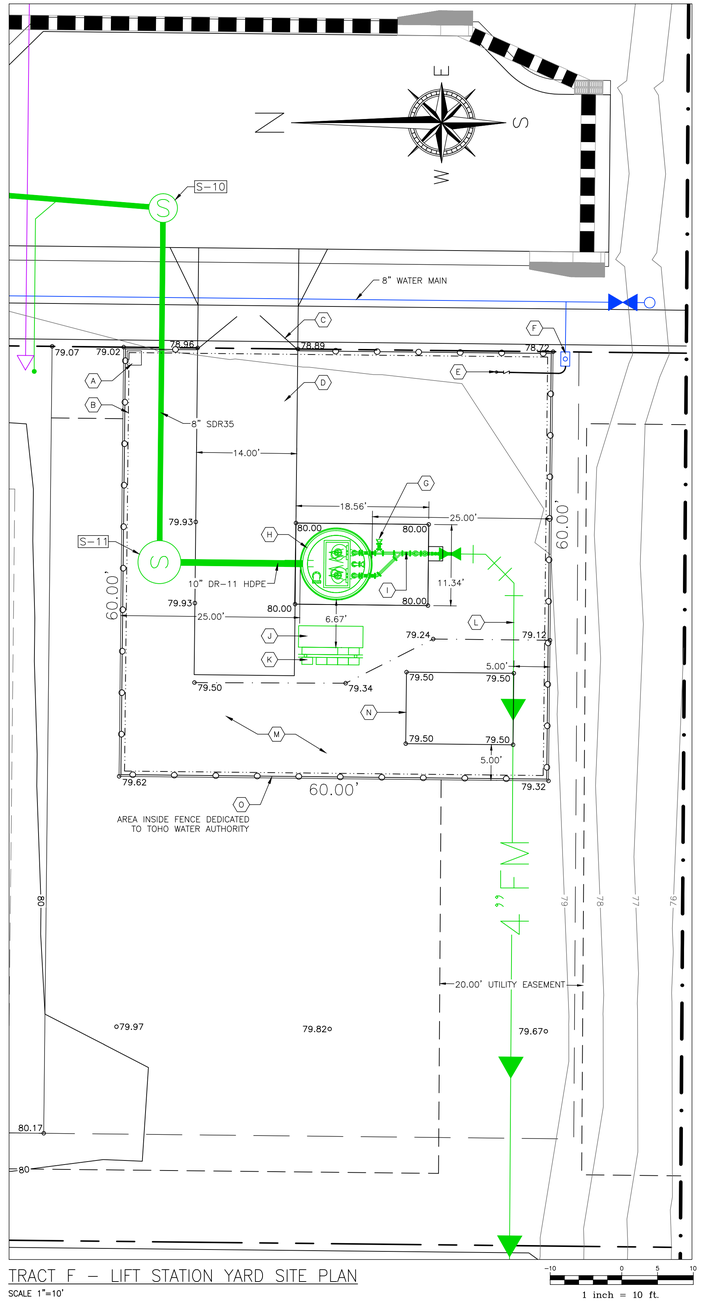


TRACT F – LIFT STATION YARD AUTO-TURN EXHIBIT 2 (EXIT)

SCALE 1"=20'

-20 0 10 20

1 inch = 20 ft.



TRACT F – LIFT STATION YARD SITE PLAN

SCALE 1"=10'

-10 0 5 10

1 inch = 10 ft.

- (A) GROUND TEST ENCLOSURE
- (B) 2/0 TINNED COPPER GROUNDING WIRE LOOP, ±12" INSIDE PROPERTY LINE
- (C) CHAIN LINK DOUBLE 8' SWING GATES
- (D) CONCRETE DRIVEWAY: 6" CONCRETE (3,500 PSI TYPE 2 CEMENT) REINFORCED w/ 6X6 W2.9/2.9 WELDED WIRE FABRIC TO ASSHTO H-20 TRAFFIC LOADING. STABILIZE BASE TO MIN. 12"
- (E) 2" RPZ BACKFLOW PREVENTER AND HOSE BIBB (TYP.)
- (F) 2" WATER METER
- (G) ALL PUMPOUT DISCHARGE LINES SHALL HAVE A 6" ALUMINUM FEMALE CAM & GROOVE ADAPTER/ASA FLANGE WITH CHAIN-LOCK MALE CAM & GROOVE DUST CAP.
- (H) 8' POLYMER CONCRETE WET-WELL
- (I) ENDRESS-HAUSER PROMAG 500 FLOW METER
- (J) RUBBER MAT TO BE 36" x WIDTH OF THE CONTROL PANEL
- (K) CONTROL PANEL/RTU
- (L) 4" DR18 PVC SANITARY FORCE MAIN OUT
- (M) CRUSHED CONCRETE OR 4" NO.57 BEDDING ROCK, GEOTEXTILE FABRIC UNDER ROCK OR CRUSHED CONCRETE TYP. WITHIN FENCE
- (N) 8' x 12' x 6" THICK CONCRETE SLAB FOR BIOREM SK-200 ODOR CONTROL UNIT
- (O) 6' HEIGHT CHAIN LINK FENCE W/ 3 STRANDS OF BARBED WIRE 3" INSIDE PROPERTY LINE

DATE	REVISION
Oct. 2025	Revised per St. Cloud comments dated Sep. 5, 2025

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

TOHO WATER AUTHORITY LIFT STATION DETAILS

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
October 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
1" = 50'

SHEET NUMBER
39

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Thomas L. Knight, PE, on October 15, 2025.

Signature must be verified on any electronic copies.

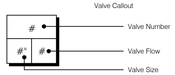
IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
25 50 10 20	Hunter PCB-R Flood Bubbler, 1/2in. FIPT. With Purple Cap for Reclaimed Water Use.	654

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Hunter ICZ-101-25-LF-R Drip Control Zone Kit. 1in. ICV Globe Valve with 1in. HY100 filter system. Pressure Regulation: 25psi. Flow Range: .5 GPM to 15 GPM. 150 mesh stainless steel screen. Reclaimed purple filter cover.	6
F	Netafim TLFV-1 Automatic Flush Valve, with Insert Inlet	14
	Area to Receive Dripline Hunter HDL-09-12-R HDL-09-12-R: Hunter Dripline with 0.9 GPH flow. Light brown tubing with purple striping. Emitters at 12" O.C. Dripline laterals spaced at 12" apart, with emitters offset for triangular pattern. Install with Hunter PLD barbed or PLD-LOC fittings.	3,647 lf

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Hunter ICV-G-R 1in., 1-1/2in., 2in., and 3in. Plastic Electric Remote Control Valves, Globe Configuration, with NPT Threaded Inlet/Outlet, for Commercial/Municipal Use. With Reclaimed Water ID, Purple Handle.	10
	Nibco T-113 Class 125 bronze gate shut off valve with wheel handle, same size as mainline pipe diameter at valve location. Size Range - 1/4in. - 3in.	9
C	Hunter I2C-1600-PL 16 Station Outdoor Modular Controller. With one ICM-800 Module. Commercial Use. Plastic Cabinet.	1
RS	Hunter WR-CLIK Rain Sensor, install within 1000 ft of controller, in line of sight. 22-28 VAC/VDC 100 mA power from timer transformer. Mount as noted.	1
F	Amiad 2-A-MSIG-Steel Screen Amiad 2in. Mini Sigma, Angled Self-Cleaning Filter, BSPT or NPT inlet-outlet. Stainless Steel Weavewire Screen Element. ADI-P Bluetooth Range Controller. Maximum working pressure 116psi.	1
POC	Point of Connection 1 1/2" Service Tap on existing reclaim line. Irrigation Contractor to meet all county/local codes	1
	Irrigation Lateral Line: PVC Class 200 SDR 21-NP	14,336 lf
	Irrigation Mainline: PVC Schedule 40-NP	3,228 lf
	Pipe Sleeve: PVC Schedule 40	467.8 lf

Valve Callout



VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	WIRE	PSI	PSI @ POC	PRECIP
1	Hunter ICZ-101-25-LF-R	1"	Area for Dripline	4.68	616.3	25.3	25.4	1.43 in/h
2	Hunter ICV-G-R	1-1/2"	Bubbler	36	623.2	29.3	34.1	2.34 in/h
3	Hunter ICV-G-R	1-1/2"	Bubbler	33	1,073	26.9	35.1	2.36 in/h
4	Hunter ICZ-101-25-LF-R	1"	Area for Dripline	8.76	1,196	29.1	29.9	1.43 in/h
5	Hunter ICV-G-R	1-1/2"	Bubbler	33	1,314	27.0	37.4	2.31 in/h
6	Hunter ICV-G-R	1-1/2"	Bubbler	34	742.4	26.0	32.5	2.22 in/h
7	Hunter ICV-G-R	1"	Bubbler	21	48.1	26.1	26.2	2.32 in/h
8	Hunter ICZ-101-25-LF-R	1"	Area for Dripline	10.77	157.0	31.1	31.5	1.44 in/h
9	Hunter ICV-G-R	1-1/2"	Bubbler	26	791.2	23.7	27.9	2.21 in/h
10	Hunter ICV-G-R	1-1/2"	Bubbler	26	573.8	24.0	26.9	2.21 in/h
11	Hunter ICZ-101-25-LF-R	1"	Area for Dripline	14.57	564.5	34.9	35.9	1.43 in/h
12	Hunter ICV-G-R	1-1/2"	Bubbler	36	544.6	28.4	33.5	2.26 in/h
13	Hunter ICV-G-R	1-1/2"	Bubbler	39	1,138	28.3	41.7	2.32 in/h
14	Hunter ICZ-101-25-LF-R	1"	Area for Dripline	6.09	1,152	26.6	27.6	1.43 in/h
15	Hunter ICV-G-R	1-1/2"	Bubbler	42	606.7	32.2	35.9	2.35 in/h
16	Hunter ICZ-101-25-LF-R	1"	Area for Dripline	9.56	601.3	33.2	33.4	1.43 in/h
	Common Wire				3,228			

WATERING SCHEDULE

NUMBER	MODEL	TYPE	PRECIP	IN./WEEK	MIN./WEEK	GAL./WEEK	GAL./DAY
1	Hunter ICZ-101-25-LF-R	Area for Dripline	1.43 in/h	1	43	201	
2	Hunter ICV-G-R	Bubbler	2.34 in/h	1	26	936	
3	Hunter ICV-G-R	Bubbler	2.36 in/h	1	26	858	
4	Hunter ICZ-101-25-LF-R	Area for Dripline	1.43 in/h	1	43	377	
5	Hunter ICV-G-R	Bubbler	2.31 in/h	1	26	858	
6	Hunter ICV-G-R	Bubbler	2.22 in/h	1	27	918	
7	Hunter ICV-G-R	Bubbler	2.32 in/h	1	26	546	
8	Hunter ICZ-101-25-LF-R	Area for Dripline	1.44 in/h	1	42	452	
9	Hunter ICV-G-R	Bubbler	2.21 in/h	1	28	728	
10	Hunter ICV-G-R	Bubbler	2.21 in/h	1	28	728	
11	Hunter ICZ-101-25-LF-R	Area for Dripline	1.43 in/h	1	42	612	
12	Hunter ICV-G-R	Bubbler	2.26 in/h	1	27	972	
13	Hunter ICV-G-R	Bubbler	2.32 in/h	1	26	1,014	
14	Hunter ICZ-101-25-LF-R	Area for Dripline	1.43 in/h	1	43	262	
15	Hunter ICV-G-R	Bubbler	2.35 in/h	1	26	1,092	
16	Hunter ICZ-101-25-LF-R	Area for Dripline	1.43 in/h	1	43	411	
		TOTALS:			522	10,965	

CRITICAL ANALYSIS

Generated:	2025-05-16 17:13
P.O.C. NUMBER: 02	
Water Source Information:	Service Tap on existing reclaim line. Irrigation Contractor to meet all county/local codes
FLOW AVAILABLE	
Point of Connection Size:	1 1/2"
Flow Available	46.59 GPM
PRESSURE AVAILABLE	
Static Pressure at POC:	50 PSI
Pressure Available:	50 PSI
DESIGN ANALYSIS	
Maximum Station Flow:	42 GPM
Flow Available at POC:	46.59 GPM
Residual Flow Available:	4.59 GPM
Critical Station:	13
Design Pressure:	20 PSI
Friction Loss:	6.06 PSI
Fittings Loss:	0.61 PSI
Elevation Loss:	0 PSI
Loss through Valve:	1.68 PSI
Pressure Req. at Critical Station:	28.3 PSI
Loss for Fittings:	1.22 PSI
Loss for Main Line:	12.2 PSI
Loss for POC to Valve Elevation:	0 PSI
Loss for Backflow:	0 PSI
Critical Station Pressure at POC:	41.7 PSI
Pressure Available:	50 PSI
Residual Pressure Available:	8.29 PSI

CLIENT:

VISTA GRAND PROPERTIES, LLC

3534 MEDITERRA DRIVE
CLERMONT, FL 34711

PROJECT:

OLD HICKORY TREE ESTATES

LOCATION:

OLD HICKORY TREE RD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

SEAL:



This item as been electronically signed and sealed by Karina A. Veaudry, RLA, Registered Landscape Architect # LA6666803, using a Digital Signature on 06-15-2023. Printed copies to this document are not considered signed and sealed and the signature must be verified on any electronic copies.

REVISIONS	DATE

DESIGNED BY: KAV
DRAWN BY: ECP
CHECKED BY: KAV
DATE: 05-13-2025

PROJECT NUMBER: 20240913OHE

SHEET TITLE:

IRRIGATION SCHEDULES

SHEET NUMBER:

LI001

IRRIGATION MATERIALS:

1. **PRODUCTS**

A. ALL MATERIAL SHALL BE OF NEW STOCK AND BEST GRADE OF ITS KIND. IT SHALL BE AS SPECIFIED UNLESS OTHERWISE SPECIFICALLY APPROVED BY THE LANDSCAPE ARCHITECT. MATERIALS NOT NAMED SHALL BE SUBJECT TO APPROVAL OR REJECTION BY THE LANDSCAPE ARCHITECT. IN ALL CASES, WORKMANSHIP AND MATERIAL SHALL CONFORM TO THE LOCAL PLUMBING CODE HAVING JURISDICTION. MATERIALS SHALL BE INSTALLED AS RECOMMENDED BY THE MANUFACTURER.

B. AVAILABLE MANUFACTURERS:

1. SUBJECT TO COMPLIANCE WITH REQUIREMENTS, MANUFACTURERS OFFERING PRODUCTS WHICH MAY BE INCORPORATED IN THE WORK INCLUDE THE FOLLOWING:

a. RAIN BIRD

b. HUNTER INDUSTRIES

c. NETAFIM

d. TORO

2. PRODUCTS THE CONTRACTOR WISHES TO SUBSTITUTE AS AN “APPROVED EQUIVALENT” MUST BE SUBMITTED TO THE LANDSCAPE ARCHITECT, IN WRITING, A MINIMUM OF TEN (10) DAYS PRIOR TO THE BID DATE. THE LANDSCAPE ARCHITECT WILL PROVIDE EITHER AN APPROVAL OR REJECTION OF ALL PRODUCTS SUBMITTED IN THIS FASHION.

D. PLASTIC PIPE SHALL BE RIGID, HIGH IMPACT, TYPE 1, UN-PLASTICIZED POLYVINYL CHLORIDE. THE PIPE SHALL BE HOMOGENEOUS THROUGHOUT AND FREE FROM VISIBLE CRACKS, HOLES, FOREIGN MATERIALS, BLISTERS, DELETERIOUS WRINKLES OR DENTS AND SHALL CONFORM TO THE FOLLOWING DIMENSIONS AND PHYSICAL PROPERTIES:

1. ALL PLASTIC PIPE SHALL BE CONTINUOUSLY AND PERMANENTLY MARKED WITH MANUFACTURER'S NAME, KIND OF PIPE, MATERIAL SIZE, IPS, NSF APPROVAL, SCHEDULE AND TYPE.

2. PLASTIC PIPE SHALL BE MANUFACTURED BY LASCO, CELANESE, PACIFIC WESTERN, COLONIAL, UNIVERSAL OR AS BY SPECIFIED EMITTERS, AT APPROPRIATE P.S.I. RATINGS.

3.POLYETHYLENE PIPE TO BE USED FOR SWING JOINTS (FOR SPRAY HEADS ONLY), CONNECTORS OR EMITTERS AT APPROPRIATE P.S.I. RATINGS.

E. PIPE FITTINGS:

1. PLASTIC PIPE FITTINGS TO BE INSTALLED SHALL BE MEDIUM WEIGHT INJECTION MOLDED FOR VIRGIN TYPE 2 HIGH IMPACT UN-PLASTICIZED RIGID POLYVINYL CHLORIDE (P.V.C.) MOLDING COMPOUND. ALL PLASTIC SLIP COUPLINGS SHALL BE EXTRUDED FITTINGS FROM SAME MATERIAL AS SPECIFIED FOR PLASTIC PIPING HEREIN, UNLESS OTHERWISE APPROVED BY THE LANDSCAPE ARCHITECT. PLASTIC PIPE CEMENT SHALL BE RECOMMENDED BY PIPE MANUFACTURER.

2. GALVANIZED PIPE AND FITTINGS: WHERE INDICATED, OR REQUIRED BY CODE, USE GALVANIZED STEEL PIPE ASA SCHEDULE 40 MILD STEEL SCREWED PIPE. FITTINGS SHALL BE MEDIUM GALVANIZED SCREWED, BEADED MALLEABLE IRON. GALVANIZED COUPLINGS MAY BE A MERCHANT COUPLING.

3. UNDER PAVEMENT LINES: ALL PIPING UNDER CONCRETE AND ASPHALT VEHICLE PAVEMENT, CURBS, UNPAVED AREAS SUBJECT TO OTHER THAN NORMAL LOADS SHALL BE RIGID P.V.C. SCHEDULE 40.

G. SPRINKLER RISERS AND CONNECTORS:

1. SHRUB RISERS ARE TO BE SCHEDULE 40.

2. POP-UP SPRAY CONNECTORS (FROM TEE TO HEAD BASE) ARE TO BE ½ “ FLEXIBLE PVC

3. POP-UP ROTOR CONNECTORS (FROM TEE TO HEAD BASE) ARE TO BE RIGID 3/4” LASCO SWIVEL JOINTS

H. VALVES:

1. MANUFACTURER'S STANDARD, OF TYPE AND SIZE REQUIRED, AND AS HEREIN FURTHER SPECIFIED, CLEARLY IDENTIFIED WITH PURPLE MARKINGS OR LABELS FOR RECLAIMED WASTE WATER.

2. AUTOMATIC CIRCUIT VALVES: GLOBE OR ANGLE CONFIGURATION VALVES OPERATED BY LOW POWER SOLENOID, NORMALLY CLOSED, MANUAL FLOW ADJUSTMENT. ALL ELECTRIC/HYDRAULIC CONTROL VALVES SHALL BE FULLY COMPATIBLE WITH THE AUTOMATIC CONTROLLER WITH RESPECT TO THE TYPE OF CONTROL, VOLTAGE, AMPERAGE OR PRESSURE SPECIFICATIONS AND “NORMAL” SEQUENCE POSITIONING.

3. QUICK COUPLING VALVES (IF SPECIFIED) : SHALL HAVE BRASS TWO-PIECE BODY DESIGNED FOR WORKING PRESSURE OF 150 P.S.I. OPERABLE WITH A QUICK COUPLER. KEY SIZE AND TYPE SHALL BE AS SHOWN ON THE PLANS OR PRESENTED IN THE EQUIPMENT SCHEDULE. COVER TO BE CLEARLY IDENTIFIED BY PURPLE MARKINGS FOR RECLAIMED WASTE WATER.

I. SPRINKLER HEADS:

1. MANUFACTURER'S STANDARD UNIT DESIGNED TO PROVIDE UNIFORM COVERAGE OVER ENTIRE AREA OF SPRAY SHOWN ON DRAWINGS AT AVAILABLE WATER PRESSURE

2. POP-UP SPRAY: FIXED OR ADJUSTABLE PATTERN, WITH SCREW-TYPE FLOW ADJUSTMENT AND STAINLESS STEEL RETRACTION SPRING.

3. POP-UP ROTARY SPRAYS: GEAR-DRIVEN, FULL CIRCLE AND PART CIRCLE.

J. VALVE BOXES:

1. ALL GATE AND CONTROL VALVES SHALL BE SET IN VALVE BOXES WITH SNAP LOCK COVERS FLUSH WITH FINISHED GRADE. VALVE BOXES SHALL BE “CARSON” OR “AMETEK”.

K. AUTOMATIC CONTROL SYSTEM:

1. THE AUTOMATIC CONTROLLERS SHALL BE AS SPECIFIED ON THE PLANS OR SHALL BE OF A CAPACITY AS REQUIRED TO EFFICIENTLY OPERATE THE ZONES THROUGHOUT THE BUILDING AND PARKING LOT SITES. THE 120 VOLT ELECTRICAL POWER TO THE AUTOMATIC CONTROLLER'S LOCATION IS TO BE FURNISHED BY THE OWNER (SEE FACILITIES MANAGER FOR EXACT CONTROLLER LOCATION). IRRIGATION SUB-CONTRACTOR SHALL MAKE ALL CONNECTIONS IN THE LOW-VOLTAGE SYSTEM BETWEEN THE AUTOMATIC CONTROLLER AND THE VALVES.

2. SCHEDULE THE CONTROLLER TIME CLOCKS TO OPERATE THE SYSTEM CONTROL AS NEARLY AS POSSIBLE BETWEEN THE HOURS OF 11:00 P.M. AND 7:00 A. M., AND ON THE DAYS REQUIRED BY LOCAL WATERING GUIDELINES FOR DEEP WELL WATER SOURCE SYSTEMS.

L. SLEEVES AND CONDUITS:

1. ALL PIPE AND WIRING UNDER PAVING SHALL BE PLACED IN SEPARATE SCHEDULE 40 P.V.C. SLEEVES AND CONDUIT RESPECTIVELY FOR THE FULL PAVEMENT COVERED LENGTH. SLEEVES AND CONDUIT ARE TO BE INSTALLED AS SHOWN ON THE IRRIGATION PLAN OR DETERMINED IN THE FIELD. SLEEVES AND CONDUIT SHALL BE OF ADEQUATE DIAMETER TO ACCOMMODATE THE PIPE (S) / WIRE (S) WITH SUFFICIENT FREE PLAY TO ALLOW REMOVAL AND REINSTALLATION WITHOUT BINDING.

M. CONTROL WIRING:

1. CONNECTIONS BETWEEN THE AUTOMATIC CONTROLLERS AND THE ELECTRIC VALVES SHALL BE MADE WITH DIRECT BURIAL WIRE AWG-U.F. # 14-600 VOLTS. USE RED FOR PILOT WIRE AND WHITE FOR COMMON WIRE. INSTALL IN ACCORDANCE WITH VALVE MANUFACTURER'S SPECIFICATION AND WIRE CHART. WIRE SHALL OCCUPY THE SAME TRENCH AND SHALL BE INSTALLED ALONG THE SAME ROUTE AS PRESSURE SUPPLY OR LATERAL LINES. WHERE MORE THAN ONE (1) WIRE IS PLACED IN A TRENCH, THE WIRING SHALL BE TAPED TOGETHER AT INTERVALS OF TEN (10) FEET. WHEN WIRE ONLY IS PLACED IN A TRENCH, PLACE UNDER A CONTINUOUS STRIP OF SUBGRADE: USE PRESSURE TREATED SOUTHERN YELLOW PINE, 1”X2”. AN EXPANSION CURL SHALL BE PROVIDED WITHIN THREE (3) FEET OF EACH WIRE CONNECTION AND AT LEAST EVERY HUNDRED (100) FEET IN LENGTH. EXPANSION CURLS SHALL BE FORMED BY WRAPPING AT LEAST FIVE (5) TURNS OF WIRE AROUND A PIPE 1” (OR MORE) IN DIAMETER, THEN WITHDRAWING PIPE. ALL SPLICES SHALL BE MADE WITH KING DRYCONN WIRE-NUTS. ALL CONTROL WIRING OR TUBING ROUTED BENEATH OR THROUGH PAVEMENT, WALKS, CURBS AND/OR OTHER STRUCTURAL ELEMENTS SHALL BE RUN THROUGH P.V.C. SCHEDULE 40 CONDUIT OF SUFFICIENT DIAMETER FOR WIRE PULLING. ALL CONDUIT AND SLEEVES FOR IRRIGATION PIPES AND CONTROL WIRING SHALL BE INSTALLED BY THE IRRIGATION SUB-CONTRACTOR. THE 120 VOLT ELECTRICAL POWER TO THE CONTROLLER LOCATION TO BE FURNISHED BY THE OWNER.

N. VALVES:

1. GENERAL: MANUFACTURER'S STANDARD, OF TYPE AND SIZE REQUIRED. AND/OR AS SPECIFIED ON THE PLANS.

2. GATE VALVES SHALL CONFORM TO FEDERAL SPECIFICATIONS WWV 54, TYPE 1, CLASS A, WITH ALL BRASS OR BRONZE BODY, NON-RISING STEM,” APOLLO BY LASCO”

3. VALVES SHALL BE CLEARLY IDENTIFIED WITH PURPLE MARKINGS AND LABELS WHEN RECLAIMED WATER IS USED.

4. AUTOMATIC CIRCUIT VALVES: GLOBE OR ANGLE CONFIGURATION VALVES OPERATED BY LOW-POWER SOLENOID, NORMALLY CLOSED, MANUAL FLOW ADJUSTMENT. ALL ELECTRIC/HYDRAULIC CONTROL VALVES SHALL BE FULLY COMPATIBLE WITH THE AUTOMATIC CONTROLLER WITH RESPECT TO THE TYPE OF CONTROL VOLTAGE, AMPERAGE OR PRESSURE SPECIFICATIONS AND “NORMAL” SEQUENCE POSITIONING.

5. QUICK COUPLING VALVES: WHEN SPECIFIED, SHALL HAVE A BRASS TWO-PIECE BODY DESIGNED FOR WORKING PRESSURE OF 150 P.S.I. OPERABLE WITH A QUICK COUPLER. KEY SIZE AND TYPE SHALL BE AS SHOWN ON THE PLANS OR PRESENTED IN THE EQUIPMENT SCHEDULE.

6. OTHER VALVES: SHALL BE AS STATED ON THE PLAN.

O. FILTERS:

1. A VU-FLOW 60 MESH FILTER IS REQUIRED ON ALL EMITTER SYSTEMS. ONE FILTER WILL BE REQUIRED FOR EACH SOURCE OF SUPPLY. FILTERS SHALL BE LOCATED UNDERGROUND IN AN APPROPRIATELY-SIZED METER BOX.

P. BACKFLOW PREVENTION: (IF APPLICABLE)

1. BACKFLOW PREVENTION SHALL BE APPROVED BY THE GOVERNING BODY.

Q. EMITTER PIPE:

1. EMITTER PIPE SHALL BE MANUFACTURED BY ONE OF THE AFOREMENTIONED SUPPLIERS FOR THE EXPRESS PURPOSE OF SUBSURFACE IRRIGATION.

2. PIPE SHALL HAVE PREFABRICATED IRRIGATION ORIFICES PLACED 12 INCHES ON CENTER.

3. EMITTER PIPE, IF DIFFERENT THAN THOSE STATED HEREIN, MUST BE APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT.

IRRIGATION EXECUTION:

1. **SYSTEM DESIGN**

A. GENERAL:

1. THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL IRRIGATION DESIGN DATA REQUIRED TO COMPLETE THE CONTRACT DOCUMENTS. ALL CONTRACTOR SUBMITTED DESIGN DATA MUST PROVIDE 100% COVERAGE TO ALL PLANTING AND SODDED AREAS TO BE IRRIGATED AS SHOWN ON THE PLANS.

B. DESIGN LIABILITY:

1. ALL IRRIGATION DESIGN DATA PROVIDED BY THE CONTRACTOR SHALL BE THE FULL LIABILITY OF THE CONTRACTOR. ALL SUCH DESIGN DATA SHALL BE CONSISTENT WITH MANUFACTURER'S MATERIALS AND INSTALLATION METHODS, CODE COMPLIANCE, COVERAGE, APPLICATION, DISTRIBUTION AND OPERATION AND THE PROVIDED PLANS AND TECHNICAL SPECIFICATIONS.

C. DESIGN PRESSURE:

1. DESIGN PRESSURES SHOULD BE AS RECOMMENDED BY THE PIPE AND FITTING MANUFACTURER TYPE OF PIPE SELECTED, OR AS INDICATED ON DRAWINGS.

D. EMITTER PIPE LOCATIONS:

1. IF DESIGN DATA IS REQUIRED, THE CONTRACTOR IS TO PROVIDE FINAL LAYOUT PLANS OF THE EMITTER SYSTEM SPECIFIED TO REFLECT THE ZONE AND VALVE LOCATIONS, AND SPECIFIED COVERAGE.

2. THE APPLICATION RATE SHALL NOT EXCEED THE INTAKE RATE OF THE SOIL, AND AS RECOMMENDED BY THE MANUFACTURER.

3. THE SYSTEM SHALL PROVIDE THE CAPABILITY OF ACCOMPLISHING COMPLETE WATERING OF THE ENTIRE AREAS, FOR THE PARTICULAR COMBINATION OF SOIL TYPE AND VEGETATION BEING IRRIGATED, WITHIN A PERIOD OF TIME NO GREATER THAN THAT CURRENTLY BEING RECOMMENDED BY RECOGNIZED AUTHORITIES.

4. FRICTION LOSSES FOR PIPE WILL BE DETERMINED BY THE HAZEN-WILLIAMS FORMULA. THE RETARDANCE COEFFICIENT FOR P.V.C. PIPE SHALL BE 150 AND FOR GALVANIZED PIPE 100. “C” FACTORS FOR OTHER PRODUCTS SHALL BE DETERMINED FROM MARKS MECHANICAL ENGINEERS HANDBOOK OR OTHER COMPARABLE FRICTION LOSS TABLES. MAXIMUM WATER VELOCITY SHALL NOT EXCEED 5 FEET PER SECOND IN ANY PART OF THE SYSTEM.

2. **INSTALLATION**

A. COMPLY WITH ALL REQUIREMENTS OF THE UNIFORM PLUMBING CODE.

B. LAYOUT

1. THE LOCATIONS OF HEADS ARE APPROXIMATE. MAKE MINOR ADJUSTMENTS AS NECESSARY TO AVOID PLANTINGS AND OTHER OBSTRUCTIONS AND TO OBTAIN COVERAGE. PIPE MAY BE SHOWN IN BUILDING, CONCRETE, AND/OR ASPHALT AREAS FOR CLARITY ONLY. LOCATE ALL PIPE IN PLANTING AREAS WHERE APPROPRIATE.

2. EMITTER LINES SHALL BE INSTALLED AS SHOWN ON THE PLANS.

C. EXCAVATION/TRENCHING

1. TRENCHES SHALL BE DUG STRAIGHT. TRENCH BOTTOMS SHALL BE TRUE GRADIENT PROVIDING SUPPORT TO PIPE THROUGH ITS ENTIRE LENGTH AND SHALL BE FREE FROM ROCKS, CLODS, DEBRIS AND SHARP EDGED OBJECTS. THE MINIMUM DEPTH OF LINES MEASURED TO TOP OF PIPE, UNLESS OTHERWISE INDICATED ON PLANS, SHALL BE:

a. MAIN LINES AND QUICK COUPLER LINES SHALL BE 24”.

b. LATERAL SPRINKLER LINES SHALL BE 12”

c. NON-PRESSURE ROTOR HEAD LINES SHALL BE 12”.

d. TOP OF EMITTER LINES SHALL BE AT GRADE

e. PROVIDE MINIMUM COVER OF 24” FOR ALL CONTROL WIRING.

2. WHERE REQUIRED OR INDICATED ON THE PLANS EXISTING SOD SHALL BE REMOVED WHERE TRENCHES ARE TO BE DUG, AND SHALL BE PROTECTED FROM DRYING AND REPLACED WITHIN 48 HOURS. SOD SHALL BE CUT IN SUCH A MANNER THAT A MINIMUM OF 2” OF SOIL REMAINS ON THE ROOTS. THE SOIL SHOULD BE MOIST, BUT NOT WET, TO PREVENT EXCESSIVE LOSS DUE TO CRUMBLING. THIS IS IRRIGATION SUB-CONTRACTOR SHALL HAVE ALL THE RESPONSIBILITIES TO MAINTAIN SODDING AND GRASS, TREES, SHRUBS AND PLANTS. AS REQUIRED BY SECTION 02900. THIS IRRIGATION SUB-CONTRACTOR MAY, AT HIS OPTION CONTRACT WITH THE LANDSCAPE, SODDING AND GRASS SUB-CONTRACTOR TO HANDLE THIS RESPONSIBILITY.

3. BACK-FILL SHALL NOT BE PLACED UNTIL THE INSTALLED IRRIGATION SYSTEM HAS BEEN THOROUGHLY INSPECTED AND TESTED BY THE CONTRACTOR (THE LANDSCAPE ARCHITECT MAY REQUEST AN INSPECTION BY HIS OWN PERSONNEL PRIOR TO BACK-FILLING OF TRENCHES). BACK-FILL MATERIAL SHALL BE APPROVED SOIL, FREE FROM LARGE ROCKS, DEBRIS, OR SHARP OBJECTS. IN GENERAL, THE MATERIAL REMOVED FROM EVACUATION MAY BE USED. EXCAVATED ROCKY MATERIAL SHALL BE REMOVED FROM THE SITE AND SUITABLE FILL MATERIAL OBTAINED FOR BACK-FILL. BACK-FILLING SHALL BE DONE WHEN PIPE IS NOT IN AN EXPANDED OR CONTRACTED CONDITION DUE TO TEMPERATURE EXTREMES. COOLING OF THE PIPE CAN BE ACCOMPLISHED BY OPERATION OF THE SYSTEM FOR A SHORT TIME BEFORE BACK-FILL, OR BY BACK-FILLING IN THE EARLY PART OF THE MORNING BEFORE THE HEAT OF THE DAY. LONG RUNS OF P.V.C. PIPE SHALL BE “SNAKED” IN THE TRENCH TO ALLOW FOR CONTRACTION. BACK-FILL SHALL FOLLOW EXCAVATION WITH THE LEAST POSSIBLE DELAY. OPEN TRENCHES SHALL BE ADEQUATELY PROTECTED TO CAUSE THE LEAST POSSIBLE HAZARD TO AND INTERFERENCE WITH PEOPLE AND ANIMALS. BACK-FILL SHALL BE COMPACTED IN COMPLIANCE WITH EARTHWORK SECTION. THE OPERATION SHALL BE REPEATED UNTIL FINISHED GRADE OF BACK-FILLED TRENCHES MATCHES THAT OF ADJACENT SOIL.

D. WATER CONNECTION:

1. CONNECT IRRIGATION SYSTEM TO EXISTING SOURCE ON SITE. CONNECTION SHALL INCLUDE BUT MAY NOT BE LIMITED TO THE INSTALLATION OF APPROPRIATE GATE VALVES, SHUT-OFF VALVES, AND CONCRETE METER BOX AS REQUIRED. COORDINATE TIME OF CONNECTION WITH AFFECTED PERSONS IN ORDER TO MINIMIZE IRRIGATION DOWNTIME. REQUIRED MODIFICATIONS AND/OR RELOCATIONS OF EQUIPMENT ASSOCIATED WITH THE EXISTING WELL SHALL BE INCLUDED IN THE IRRIGATION WORK.MUNICIPAL AND COUNTY REGULATIONS MUST BE ADHERED TO DURING THIS AND ALL OTHER PORTIONS OF WORK IN THIS SECTION.

2. MUNICIPAL AND COUNTY REGULATIONS MUST BE ADHERED TO DURING THIS AND ALL OTHER PORTIONS OF WORK IN THIS SECTION.

E. CIRCUIT VALVES:

1. PROVIDE UNION ON DOWNSTREAM SIDE

2. ADJUST AUTOMATIC CONTROL VALVES TO PROVIDE FLOW RATE OF RATED OPERATING PRESSURE REQUIRED FOR EACH SPRINKLER CIRCUIT.

3. WHEREVER POSSIBLE, LOCATE VALVES IN PLANT BED AREAS FOR BEST CONCEALMENT AND ACCESSIBILITY.

4. VALVES ARE TO BE INSTALLED IN “CARSON” VALVE BOXES, LARGE ENOUGH TO ACCOMMODATE MAINTENANCE AND OPERATION OF VALVES. PROVIDE A ½” DIAMETER RIVER GRAVEL SUMP 3” THICK AT BOTTOM OF VALVE PIT.

F. PIPING

1. PIPE SHALL BE HANDLED AND STORED IN A MANNER TO PREVENT DAMAGE. THE PLASTIC PIPE AND FITTINGS SHALL BE STORED UNDER COVER, AND SHALL BE TRANSPORTED IN A VEHICLE WITH A BED LONG ENOUGH TO ALLOW THE LENGTH OF THE PIPE TO LAY FLAT SO AS NOT TO BE SUBJECT TO UNDUE BENDING OR CONCENTRATED EXTERNAL LOAD AT ANY POINT. ANY PLASTIC PIPE THAT HAS BEEN DENTED OR DAMAGED SHALL NOT BE USED UNLESS DAMAGE HAS BEEN CUT AND PIPE IS REJOINED WITH A COUPLING.

2. CLEAN INTERIOR OF PIPE THOROUGHLY AND REMOVE ALL DIRT OR FOREIGN MATTER BEFORE LOWERING PIPE INTO TRENCH. KEEP PIPE CLEAN DURING OPERATIONS BY PLUGS OR OTHER APPROVED METHODS. THE ENDS OF ALL THREATED SHALL BE REAMED OUT FULL SIZE WITH A LONG TAPER REAMER SO AS TO BE PARTIALLY BELL-MOUTHED AND PERFECTLY SMOOTH. ALL WATER LINES SHALL BE THOROUGHLY FLUSHED OUT BEFORE HEADS ARE INSTALLED.

3. LAY PIPE ON SOLID SUB-BASE, UNIFORMLY SLOPED WITHOUT HUMPS OR DEPRESSIONS.

4. INSTALL P.V.C. PIPE IN DRY WEATHER WHEN TEMPERATURE IS ABOVE 40 DEGREES FAHRENHEIT IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. ALLOW JOINTS TO CURE AT LEAST 24 HOURS AT TEMPERATURES ABOVE 40 DEGREES FAHRENHEIT BEFORE TESTING, UNLESS OTHERWISE RECOMMENDED BY MANUFACTURER.

5. WELDED JOINTS SHALL BE GIVEN AT LEAST 15 MINUTES SET-UP CURING TIME BEFORE MOVING OR HANDLING. PIPE SHALL BE PARTIALLY CENTER LOADED TO PREVENT ARCHING AND WHIPPING UNDER PRESSURE. PLASTIC PIPE SHALL BE CUT WITH A HAND SAW, HACKSAW OR OTHER TOOL APPROVED FOR SUCH USE IN A MANNER SO AS TO INSURE SQUARE ENDS.

BURRS AT CUT ENDS SHALL BE REMOVED PRIOR TO INSTALLATION SO THAT A SMOOTH UNOBSTRUCTED FLOW WILL BE OBTAINED. ALL PLASTIC-TO -PLASTIC JOINTS SHALL BE SOLVENT-WELD JOINTS.

ONLY THE SOLVENT RECOMMENDED BY THE PIPE MANUFACTURER SHALL BE USED. THE SOLVENT-WELD JOINTS SHALL BE MADE IN THE FOLLOWING MATTER:

- THOROUGHLY CLEAN THE MATING PIPE AND FITTING WITH A CLEAN DRY CLOTH.
- APPLY PRIMER TO ALL CONNECTIONS PRIOR TO APPLYING SOLVENT. USE ONLY COMPATIBLE PRIMER FOLLOWING MANUFACTURER'S SPECIFICATIONS.
- APPLY A UNIFORM COAT OF SOLVENT TO OUTSIDE OF THE PIPE WITH A NON-SYNTHETIC BRISTLE BRUSH. APPLY SOLVENT TO FITTING IN A SIMILAR MATTER.
- REAPPLY A LIGHT COAT OF SOLVENT TO PIPE AND QUICKLY INSERT IT INTO THE FITTING. GIVE THE PIPE OR FITTING A QUARTER TURN TO INSURE EVEN DISTRIBUTION OF THE SOLVENT AND MAKE SURE THE PIPE IS INSERTED TO THE FULL DEPTH OF THE FITTING SOCKET.
- HOLD IN POSITION FOR 15 SECONDS. WIPE OFF EXCESS SOLVENT THAT APPEARS AT THE OUTER SHOULDER OF THE FITTINGS.
- CARE SHALL BE TAKEN SO AS NOT TO USE AN EXCESS AMOUNT OF SOLVENT THEREBY CAUSING A BURR OR OBSTRUCTION TO FORM ON THE INSIDE OF THE PIPE. THE JOINTS SHALL BE ALLOWED TO SET AT LEAST 24 HOURS BEFORE PRESSURE IS APPLIED TO THE SYSTEM.

E. PIPE JOINTING, IN GENERAL, SHALL BE PERFORMED BY COMPETENT TRADESMEN SPECIALLY TRAINED IN THE TYPE OF WORK REQUIRED AND USING TOOLS AND EQUIPMENT RECOMMENDED BY THE MANUFACTURERS OF THE PIPE, FITTINGS OR EQUIPMENT.

F. GALVANIZED STEEL PIPE AND FITTINGS: THREADS SHALL BE SOUND, CLEAN CUT, AND WELL FITTING. THREATED JOINTS SHALL BE MADE UP WITH THE BEST QUALITY PURE JOINT COMPOUND OR LEAD PASTE, CAREFULLY AND SMOOTHLY PLACED ON THE MALE THREADS ONLY, REMADE WITH NEW MATERIAL. USE OF THREAD CEMENT OR CAULKING TO MAKE JOINTS TIGHT WILL NOT BE PERMITTED. ALL CUT ENDS SHALL BE REMADE TO FULL BORE BEFORE ASSEMBLY.

G. PLASTIC TO STEEL CONNECTIONS: MALE THREAD PLASTIC TO FEMALE THREAD STEEL SHALL BE USED. THE SAME SHALL APPLY TO PLASTIC AND BRASS OR OTHER METAL. IN NO CASE SHALL METAL BE SCREWED INTO A PLASTIC FITTING. A NON-HARDENING PIPE DOPE SUCH AS “PERMATEX NO. 2” OR EQUAL SHALL BE USED ON THREATED PLASTIC TO METAL JOINTS, AND LIGHT WRENCH PRESSURE SHOULD BE USED.

CLIENT:

VISTA GRAND PROPERTIES, LLC

3534 MEDITERRA DRIVE
CLERMONT, FL 34711

PROJECT:

OLD HICKORY TREE ESTATES

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ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
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SEAL:



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REVISIONS	DATE

DESIGNED BY:	KAV
DRAWN BY:	ECP
CHECKED BY:	KAV
DATE:	05-13-2025

PROJECT NUMBER: 20240913OHE

SHEET TITLE:

IRRIGATION NOTES

SHEET NUMBER:

LI002

IRRIGATION EXECUTION (cont):

A. HOSE BIBS:

1. IF SPECIFIED, SHALL BE INSTALLED UPSTREAM OF THE ELECTRIC VALVE IN THE SAME METER BOX. (HOSE BIBS MAY BE USED WITH A PRESSURE GAUGE TO CHECK PRESSURE.)

J. SPRINKLER HEADS AND ADJUSTMENT:

1. SPRINKLER HEADS SHALL BE INSTALLED IN A PLUMB POSITION AT INTERVALS NOT TO EXCEED THE MAXIMUM SPACING SPECIFIED BY THE MANUFACTURER FOR PROJECT CONDITIONS, OR AS INDICATED ON THE DRAWINGS.
2. HEADS IN TURF AREAS SHALL BE INSTALLED 6"AWAY FROM THE EDGE OF THE CURB OR WALK, AND SHALL BE SET 3/8" BELOW THE EDGE OF THE CURB OR WALK. ALL HEADS SHALL BE INSTALLED ON FLEXIBLE CONNECTORS OR SWING JOINTS AND SHALL ALLOW FOR VERTICAL ADJUSTMENT OF HEADS, 6" POP-UP SPRAY HEADS OR 4" POP-UP ROTORS (WHERE APPROPRIATE) SHALL BE USED IN TURF AREAS.
3. ALL GROUNDCOVER AREAS, INCLUDING MASS PLANTINGS OF DWARF SHRUBS NOT EXCEEDING 22", SHALL BE IRRIGATED WITH 12" POP UP SPRAY HEADS AND EXTENDERS.
4. SHRUB RISERS SHALL ONLY BE INSTALLED IN HEDGES OR MASS PLANTINGS OF LARGE SHRUBS AND ARE NOT TO EXTEND MORE THAN 3" ABOVE THE INSTALLED HEIGHT OF THE SHRUB. IF RISERS ARE USED IN HEDGES ABUTTING PARKING AREAS, THEY MUST BE PLACED A MINIMUM OF 30" AWAY FROM BACK OF CURB AND IMBEDDED IN HEDGE SO AS NOT TO BE SEEN OR DAMAGED BY VEHICLE OVERHANG. ALL RISERS AND OTHER ABOVE-GROUND PIPING AND FIXTURES SHALL BE PAINTED WITH A PERMANENT FLAT BLACK ENAMEL PAINT. STAKE ALL RISERS OVER 2' WITH 1/4" REINFORCING ROD FASTENED SECURELY TO RISER.
5. PROVIDE SWINGS JOINTS ON ALL POP-UPS AND ROTORS. FLEXIBLE POLY PIPE MAY BE USED AS SWING JOINTS FOR SPRAY HEADS ONLY. ALL ROTOR HEADS SHALL BE INSTALLED ON APPROPRIATE SIZED RIGID SCHEDULE 40 PVC SWING JOINTS.
6. POP-UP HEADS ADJACENT TO VEHICLE PAVEMENT THAT IS NOT CURBED SHALL BE INSTALLED WITH CONCRETE DONUT PROTECTORS SET FLUSH WITH THE TOP OF THE HEADS. HEADS INSTALLED ADJACENT TO PEDESTRIAN WALK OR CURBS SHALL BE INSTALLED 6" AWAY FROM THE CURB OR WALK. WHERE ADJACENT TO BUILDINGS, FENCES OR SIMILAR STRUCTURES, HEADS SHALL BE INSTALLED 12" AWAY FROM THE STRUCTURE.
7. INSTALL NO MULTIPLE ASSEMBLIES ON PLASTIC LINES. PROVIDE EACH ASSEMBLY WITH ITS OWN OUTLET.

3. **SYSTEM CHECK**
   1. IN NO EVENT SHALL THE CONTRACTOR COVER UP OR OTHERWISE REMOVE FROM VIEW ANY WORK UNDER THIS CONTRACT THAT HAS NOT BEEN THOROUGHLY INSPECTED AND TESTED, IF REQUIRED. IF INSPECTIONS ARE REQUIRED THE OWNER AND/OR LANDSCAPE ARCHITECT SHALL BE PRESENT AT TIME OF INSPECTION AND TESTING. ANY WORK COVERED PRIOR TO BEING INSPECTED SHALL BE OPENED TO VIEW BY THE CONTRACTOR AT HIS EXPENSE. NOTIFY THE OWNER AND LANDSCAPE ARCHITECT WHEN TESTING WILL BE CONDUCTED.
   2. PRESSURE TESTING: ALL PRESSURE LINES SHALL BE TESTED PRIOR TO BACK-FILL OF JOINTS. AS SOON AS LINES ARE CONNECTED, FLUSHED OUT, AND VALVES ARE ATTACHED, CAP ALL OUTLETS AND HYDROSTATICALLY TEST AT AVAILABLE PRESSURE FOR A CONTINUOUS 4 HOUR PERIOD, AT THE END OF WHICH THE LINES AND JOINTS WILL SHALL BE INSPECTED. IF LEAKS DEVELOP, THE JOINT OR JOINTS SHALL BE REPLACED, AND THE TEST REPEATED UNTIL ALL LEAKS ARE REPAIRED. ANY COVERED PIPE, FOUND TO LEAK, SHALL BE EXCAVATED AND REPAIRED AT THE CONTRACTOR'S EXPENSE.
   3. OPERATIONAL TESTING: THE ENTIRE INSTALLATION SHALL BE PLACED IN OPERATION BY THE CONTRACTOR AND TESTED IN THE PRESENCE OF THE OWNER OR HIS REPRESENTATIVE FOR PROPER FUNCTIONING AS A WHOLE. LOCATION AND ARC OF HEADS SHALL BE ADJUSTED IF REQUIRED TO ELIMINATE ANY DRY SPOTS, OVER-WATER OR SPILLAGE ON ADJACENT AREAS AND TO PREVENT OVER-SPRAY ONTO WALKS, ROADWAYS AND BUILDINGS AS MUCH AS POSSIBLE.
4. **AS BUILT RECORDS AND ADDITIONAL EQUIPMENT**
   1. FURNISH RECORD DRAWINGS OF "AS BUILT" CONDITIONS AS FOLLOWS:
      - 1.A. LOCATION OF WATER SUPPLY
      - 1.B. TIE-IN AND OWNER FURNISHED ELECTRICAL SERVICE AND DISCONNECTS.
      - 1.C. LOCATION OF VALVE CONTROLLERS AND OTHER CONTROL EQUIPMENT.
      - 1.D. ROUTING AND SIZING OF SPRINKLER MAIN LINE.
      - 1.E. LOCATION AND TYPE OF SPRINKLER HEADS.
      - 1.F. LOCATION AND SIZE OF GATE AND ZONE CONTROL VALVES.
      - 1.G. LOCATION OF WIRE-SPLICE BOXES.
      - 1.H. ROUTING OF ZONE CONTROL VALVE ELECTRICAL WIRING.
      - 1.I. THE LOCATION OF ALL "AS BUILT" CONDITIONS DIFFERENT FROM THE ORIGINAL DRAWING SHALL BE TO SCALE FROM PERMANENT POINTS OF REFERENCE. EXACT LOCATION OF MAIN LINE, CONTROL CABLES, AND CONTROL VALVES SHALL BE SHOWN.
   2. THE CONTRACTOR SHALL PROVIDE AS PART OF THIS CONTRACT, TWO SETS OF SPRINKLER WRENCHES FOR ADJUSTING, CLEANING OR DISASSEMBLING EACH TYPE OF SPRINKLER. TWO EACH OF ANY SPECIAL TOOLS REQUIRED FOR ANY OTHER EQUIPMENT SHALL ALSO BE FURNISHED.
   3. TWO (2) SERVICE MANUALS FOR ALL EQUIPMENT USED SHALL BE FURNISHED TO THE OWNER. MANUALS MAY BE LOOSE-LEAF AND SHOULD SHOW SHOP DRAWINGS OR EXPLODED VIEWS OF EQUIPMENT AND CATALOG NUMBER. OPERATION INSTRUCTIONS FOR ALL EQUIPMENT SHALL BE FURNISHED.
5. **WARRANTY**
   1. THE IRRIGATION SUB-CONTRACTOR AND CONTRACTOR SHALL WARRANTY ALL MATERIALS EMPLOYED IN THE IRRIGATION INSTALLATION, ARE INSTALLED AS SPECIFIED AND IS IN ACCORDANCE WITH BEST TRADE PRACTICES. THE WARRANTY SHALL ALSO STATE THERE ARE NO UNAUTHORIZED SUBSTITUTIONS OF MATERIALS.
   2. THE IRRIGATION SUB-CONTRACTOR AND CONTRACTOR SHALL WARRANTY THE WORK FOR A PERIOD OF ONE (1) YEAR.
   3. THE CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ALL PLANT MATERIALS WHICH HAVE DECLINED IN HEALTH OR HAVE DIED DUE TO A DEFECTIVE IRRIGATION SYSTEM. THE CONTRACTOR SHALL REPLACE AFFECTED PLANTINGS WITH PLANTS OF SAME VARIETY AND VALUE WITHIN TEN DAYS OF NOTICE.
   4. CORRECTIONS: SHOULD ANY TROUBLE DEVELOP WITHIN THE SPECIFIED WARRANTY PERIOD WHICH IN THE OPINION OF THE OWNER IS DUE TO INFERIOR OR FAULTY MATERIALS AND/OR WORKMANSHIP, THE TROUBLE SHALL BE REPAIRED AND MADE GOOD BY THE CONTRACTOR AT NO EXTRA COST TO THE OWNER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE LOCATION OF ALL UTILITIES OR OTHER PERMANENT OR NON-PERMANENT INSTALLATIONS FROM ANY DAMAGE WHATSOEVER.

END OF SECTION

IRRIGATION GENERAL NOTES:

1. RELATED DOCUMENTS
   - A. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION 1 SPECIFICATIONS SECTIONS, APPLY TO THIS SECTION.
   - B. RELATED WORK SPECIFIED OR AS SHOWN ELSEWHERE:
2. SCOPE OF WORK
   - A. PROVIDE ALL LABOR, MATERIALS TO INSTALL THE SPECIFIED IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS AND STATED IN THE TECHNICAL SPECIFICATIONS.
   - B. CONNECTION TO WATER SOURCE ON PROPERTY AT LOCATION SHOWN ON DRAWINGS.
3. QUALITY ASSURANCE
   - A. COMPLY WITH FEDERAL, STATE, COUNTY, LOCAL AND OTHER DULY CONSTITUTED AUTHORITIES AND REGULATORY AGENCIES.
   - B. INSTALLATION AND MATERIALS SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS FOR TURF AND LANDSCAPE IRRIGATION SYSTEMS, FLORIDA IRRIGATION SOCIETY, AND THE CURRENT UNIFORM PLUMBING CODE MECHANICAL CODE; STATE STATUTES AND PREVAILING COUNTY AND/OR MUNICIPAL ORDINANCES.
4. JOB CONDITIONS
   - A. RESPONSIBILITY TO THE OWNER: THE CONTRACTOR SHALL NOT WILLFULLY INSTALL THE PLUMBING IRRIGATION SYSTEM AS SPECIFIED IN THE CONTRACT DOCUMENTS WHEN IT IS OBVIOUS IN THE FIELD THAT THERE ARE OBSTRUCTIONS, GRADE DIFFERENCES AND/OR DISCREPANCIES IN AREA DIMENSIONS UNTIL SUCH CONDITIONS ARE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT.
   - B. UTILITIES AND STRUCTURES: ATTENTION IS DIRECTED TO THE FACT THAT OVERHEAD, UNDERGROUND AND SURFACE UTILITIES, STRUCTURES AND VEGETATION ARE IN THE AREA OF THE WORK AND MUST BE PROTECTED AGAINST DAMAGE DURING THE PROGRESS OF THE WORK.
   - C. PROTECTION AND SAFETY: THE CONTRACTOR SHALL BE RESPONSIBLE AND LIABLE FOR THE PROTECTION AND SAFETY AGAINST INJURY OF PROPERTY AND PERSONS ON OR ABOUT THE PROJECT SITE DURING THE TERM OF HIS WORK. THE CONTRACTOR SHALL PROVIDE AND PROPERLY MAINTAIN NECESSARY WARNING SIGNS AND LIGHTS, BARRICADES, RAILINGS, AND OTHER SAFEGUARDS. THE CONTRACTOR SHALL CONFORM WITH THE CURRENT OCCUPATIONAL SAFETY AND HEALTH STANDARDS.
   - D. SITE FAMILIARITY: THE CONTRACTOR SHALL VISIT THE PROJECT SITE TO EXAMINE SUCH CONDITIONS AS SOILS, VEGETATION, UTILITIES, STRUCTURES, WATER SUPPLY, ETC., AS THEY WILL INFLUENCE THE WORK PURSUANT TO BID SUBMISSION AND/OR CONTRACT EXECUTION.
   - E. UTILITY CONNECTIONS: LOCATION OF UTILITY CONNECTIONS SHALL BE SHOWN ON THE PLANS OR AS SHOWN BY THE UTILITY COMPANY. THE CONTRACTOR SHALL INCLUDE IN HIS BID ALL COSTS FOR SUCH UTILITY CONNECTIONS.
5. SUBMITTALS
   - A. SUBMIT THE FOLLOWING:

1. SUBMIT PROPOSED WORK SCHEDULE.
2. PRODUCT DATA: SUBMIT TWO (2) COPIES OF MANUFACTURER'S TECHNICAL DATA AND INSTALLATION INSTRUCTIONS FOR UNDERGROUND SPRINKLER SYSTEM. SUBMIT SAMPLES OF ALL MATERIALS AND EQUIPMENT TO BE INSTALLED ON THE PROJECT.
3. EQUIPMENT: SUBMIT A SCHEDULE OF EQUIPMENT TO BE INSTALLED TO INCLUDE : AUTOMATIC CONTROLLER, ZONE CONTROL VALVES, GATE VALVES, VACUUM BREAKER VALVES, PRESSURE THROTTLE VALVES, DIRECT BURIAL WIRE, POP-UP ROTOR HEADS, POP-UP SPRAY HEADS, FIXED SHRUB HEADS, BUBBLER HEADS, SPECIAL PURPOSE HEADS, EMITTER PIPE, FILTERS, FITTINGS AND VALVE BOXES.
4. DESIGN DATA: SUBMIT ANY ALL DESIGN DATA UNDER THESE SPECIFICATIONS FOR ALL AREAS NOT SHOWN ON THE IRRIGATION PLANS THAT NEED IRRIGATION REWORK OF THE EXISTING SYSTEM.

6. DEFINITIONS AND ABBREVIATIONS
   - A. THE DEFINITIONS AND ABBREVIATIONS GIVEN HERE BELOW SHALL BE CONSIDERED A PART OF THESE SPECIFICATIONS AND SHALL APPLY TO THE INTERPRETATION AND EXECUTION HEREOF.

1. P.S.I.: STATIC WATER PRESSURE SHALL BE GIVEN AS POUNDS PER SQUARE INCH ABBREVIATED: P.S.I., AND WHERE (1) P.S.I. SHALL EQUAL 2.31 FEET OF HEAD.
2. G.P.M.: VOLUME OF WATER SHALL BE GIVEN AS GALLONS PER MINUTE ABBREVIATED G.P.M.
3. ZONE: A ZONE SHALL BE DEFINED AS A GROUP OF HEADS OR EMITTER PIPES OPERATING AT THE SAME DOWNSTREAM UNDER A COMMON CONTROL VALVE. A ZONE SHALL BE DERIVED AS FURTHER DESCRIBED HEREINAFTER ON THE BASIS OF AVAILABLE WATER PRESSURE AND VOLUME AND PHYSICAL LOCATION/ORIENTATION.
4. P.V.C.: P.V.C SHALL DENOTE THE ABBREVIATION FOR POLYVINYL CHLORIDE (SCHEDULE 40) MATERIAL USED IN THE MANUFACTURE OF PIPE AND FITTINGS AS FURTHER SPECIFIED HEREINAFTER.
5. POLY PIPE AND POLY CONNECTORS: A FLEXIBLE POLYETHYLENE PIPE AND FITTINGS USED IN SWING JOINTS, HEAD AND PIPE CONNECTORS AND EMITTER SYSTEMS.
6. OWNER: THAT ENTITY WHICH HOLDS TITLE OR CONTROL TO THE PREMISES ON WHICH THE WORK IS PERFORMED.
7. LANDSCAPE ARCHITECT: THIS PERSON OR FIRM IS THE RESPONSIBLE REPRESENTATIVE OF THE OWNER WHO PRODUCES THE LANDSCAPE AND/OR IRRIGATION PLANS AND SPECIFICATIONS.
8. CONTRACTOR: IN REFERENCE TO THESE SPECIFICATIONS, THE "CONTRACTOR" SHALL MEAN THE IRRIGATION CONTRACTOR BIDDING ON AND/OR BEING AWARDED THE CONTRACT FOR THE WORK STIPULATED. SAID CONTRACTOR SHALL BE DULY LICENSED AND INSURED AS AN IRRIGATION SUPPLIER/CONTRACTOR TO PERFORM NECESSARY WATER SUPPLY AND DISTRIBUTION FUNCTION IN THE STATE, COUNTY AND MUNICIPALITY WHERE THE WORK IS TO BE EXECUTED.
9. PROJECT: THE PROJECT AS REFERENCED HEREIN SHALL BE THE TRACT OF REAL PROPERTY WHERE THE IRRIGATION SYSTEM IS TO BE INSTALLED.
10. CONTRACT DOCUMENTS: FOR THE PURPOSE OF BID SUBMISSION, CONTRACT AGREEMENT AND EXECUTION OF THE WORK, THE CONTACT DOCUMENTS SHALL BE BINDING UPON ALL PARTIES AND SHALL INCLUDE BUT NOT BE LIMITED TO APPLICABLE PLANS, DETAILS, SCHEDULES, SPECIFICATIONS AND BIDDER INSTRUCTIONS.
11. EQUIVALENCY: RELEVANT TO MANUFACTURER PRODUCT LINES SPECIFIED HEREIN, EQUIVALENTS SHALL BE OF LIKE TYPE, MANUFACTURE, DESIGN, MATERIAL, OPERATION AND PERFORMANCE. THEY SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT.
12. THE PLANS: DESIGN DRAWINGS AND SPECIFICATIONS PROVIDED BY THE LANDSCAPE ARCHITECT. IN THE EVENT OF CONFLICT BETWEEN THE PLANS AND THE WRITTEN SPECIFICATIONS, THE PLANS SHALL PREVAIL.

CLIENT:

VISTA GRAND PROPERTIES, LLC

3534 MEDITERRA DRIVE
CLERMONT, FL 34711

PROJECT:

OLD HICKORY TREE ESTATES

LOCATION:

OLD HICKORY TREE RD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

SEAL:



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REVISIONS	DATE

DESIGNED BY: KAV
DRAWN BY: ECP
CHECKED BY: KAV
DATE: 05-13-2025

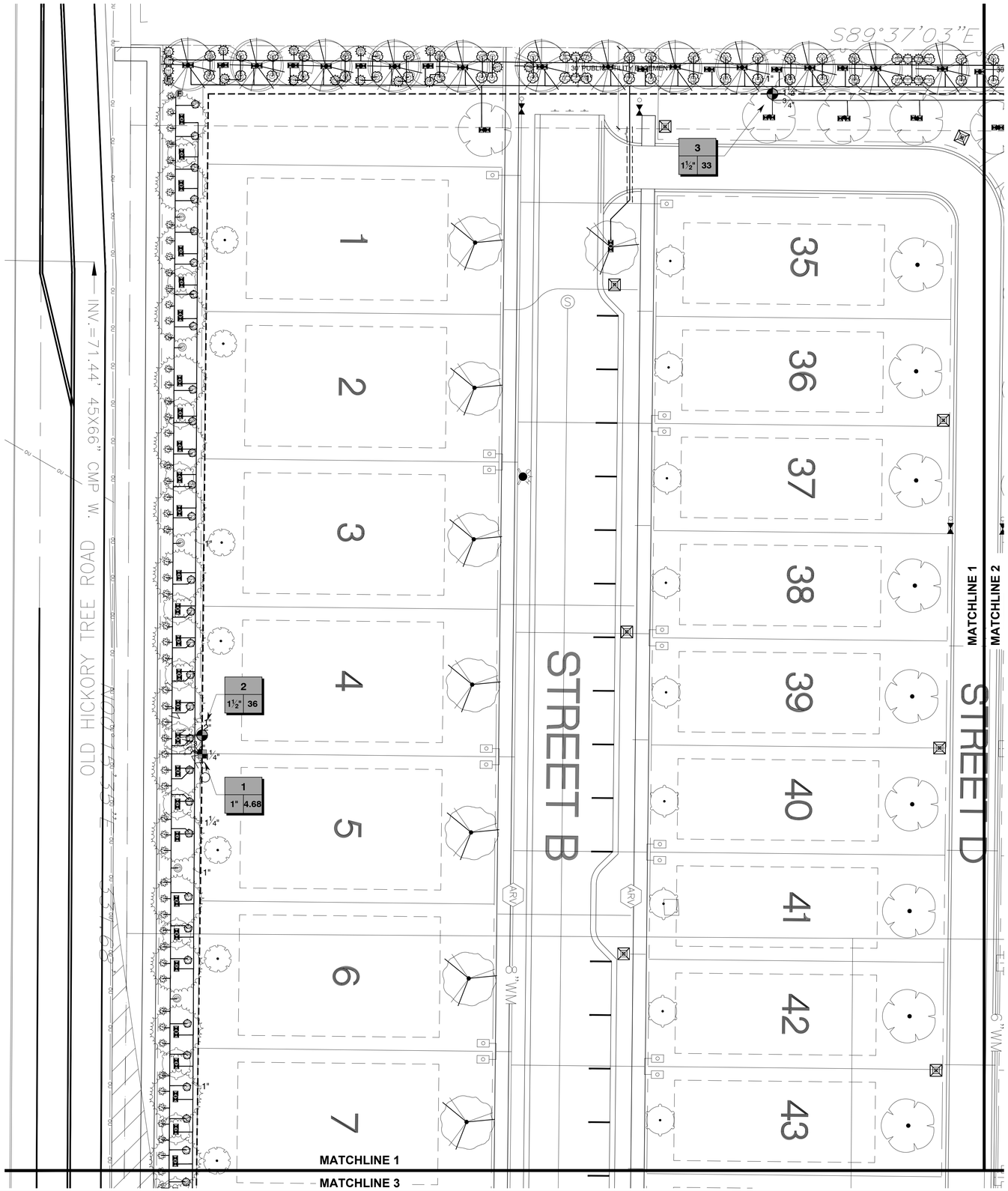
PROJECT NUMBER: 20240913OHE

SHEET TITLE:

IRRIGATION NOTES

SHEET NUMBER:

LI003



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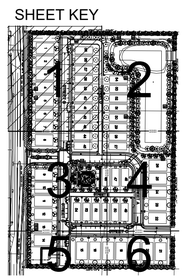

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SCALE: 1" = 20'

NORTH

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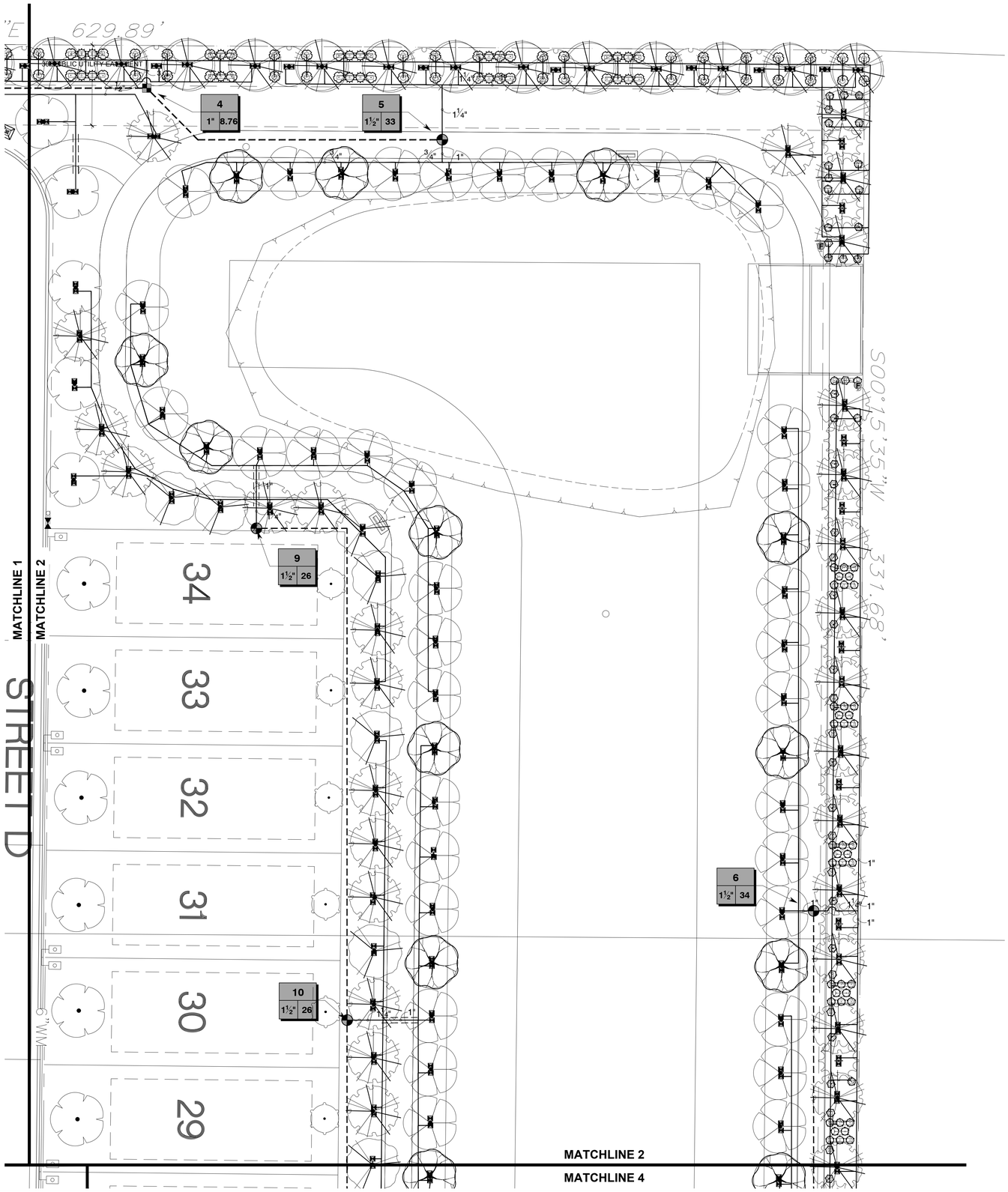
PROJECT NUMBER: 20240913OHE

SHEET TITLE:

IRRIGATION PLAN

SHEET NUMBER:

LI101



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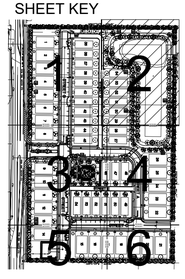

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REGISTERED LANDSCAPE ARCHITECT KARINA A. VEAUDRY STATE OF FLORIDA # 6666803

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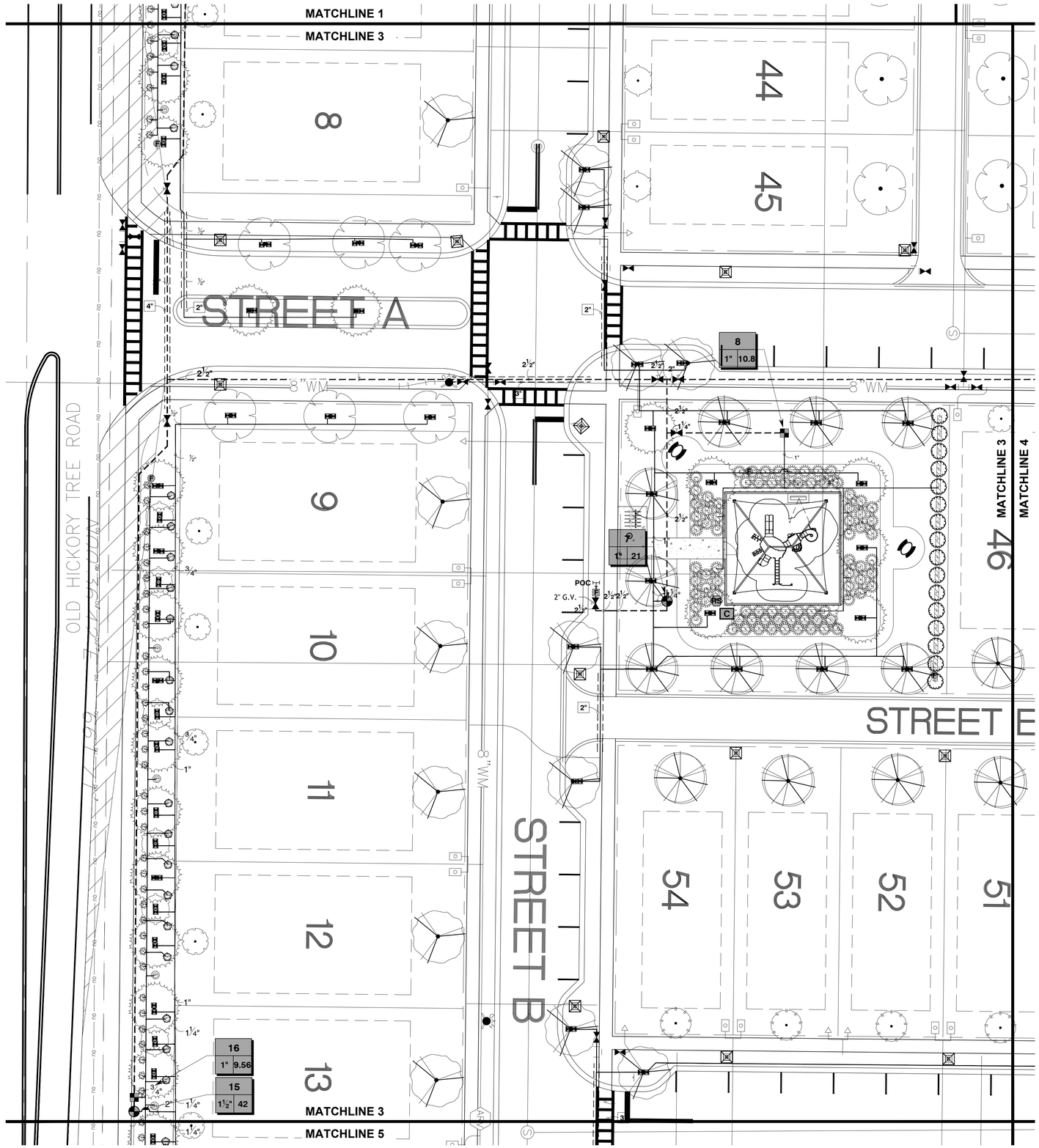
SHEET TITLE:

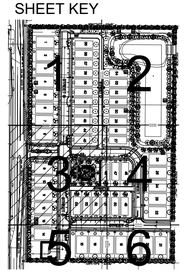
IRRIGATION PLAN

SHEET NUMBER:

LI102



SHEET KEY



20 0 10 20 40

SCALE: 1" = 20'

NORTH

811 Know what's **below.** **Call** before you dig. Dial 811 Or Call 800-282-7411

CLIENT:

VISTA GRAND PROPERTIES, LLC

3534 MEDITERRA DRIVE
CLERMONT, FL 34711

PROJECT:

OLD HICKORY TREE ESTATES

LOCATION:

OLD HICKORY TREE RD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

SEAL:

REGISTERED LANDSCAPE ARCHITECT KARINA A. VEAUDRY LA6666803 STATE OF FLORIDA

This item as been electronically signed and sealed by Karina A. Veaudry, RLA, Registered Landscape Architect # LA6666803, using a Digital Signature on 06-15-2023. Printed copies to this document are not considered signed and sealed and the signature must be verified on any electronic copies.

REVISIONS	DATE

DESIGNED BY: KAV
DRAWN BY: ECP
CHECKED BY: KAV
DATE: 05-13-2025

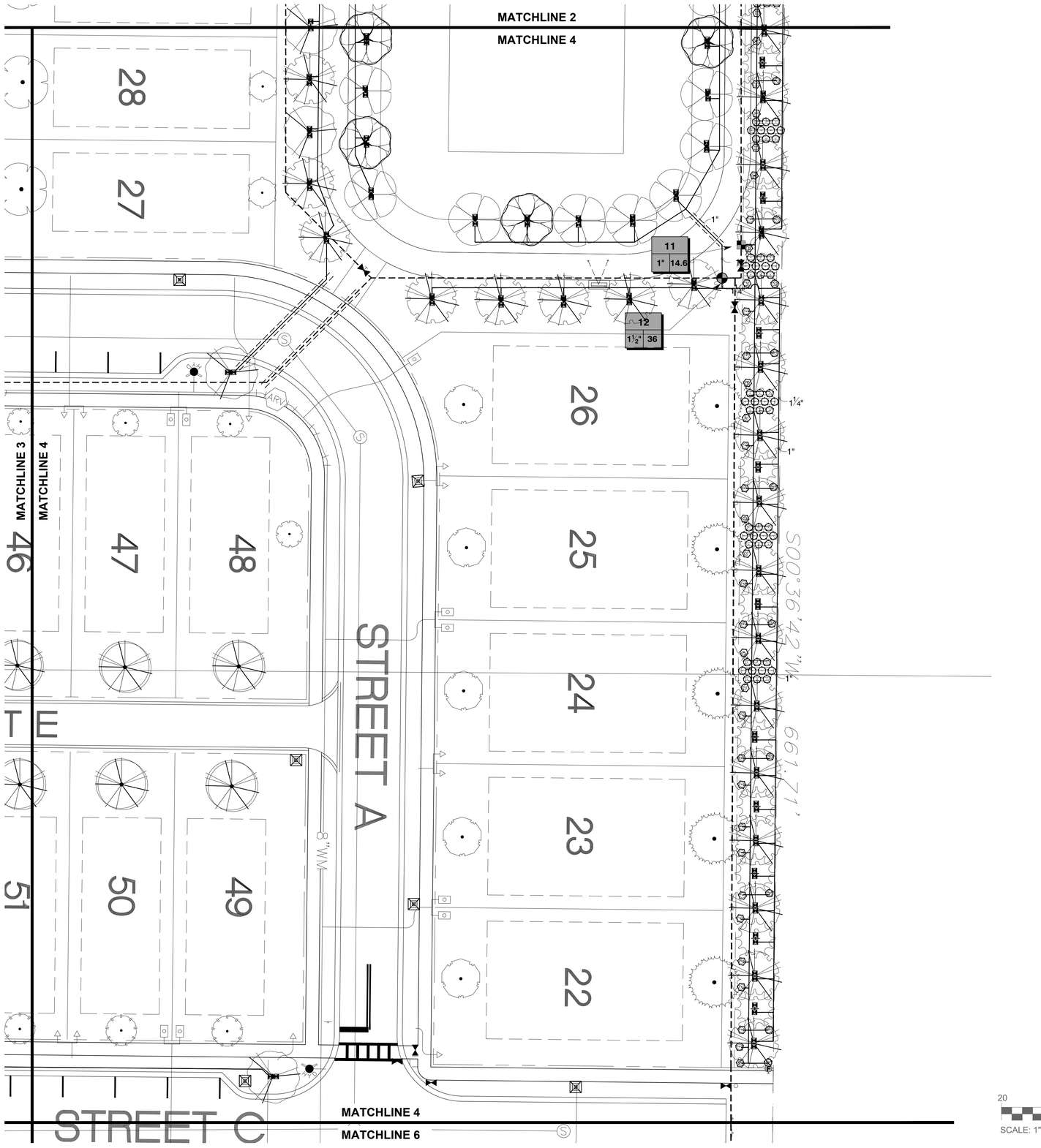
PROJECT NUMBER: 20240913OHE

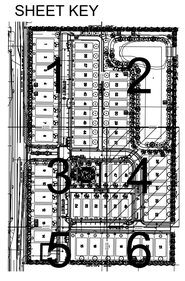
SHEET TITLE:

IRRIGATION PLAN

SHEET NUMBER:

LI103





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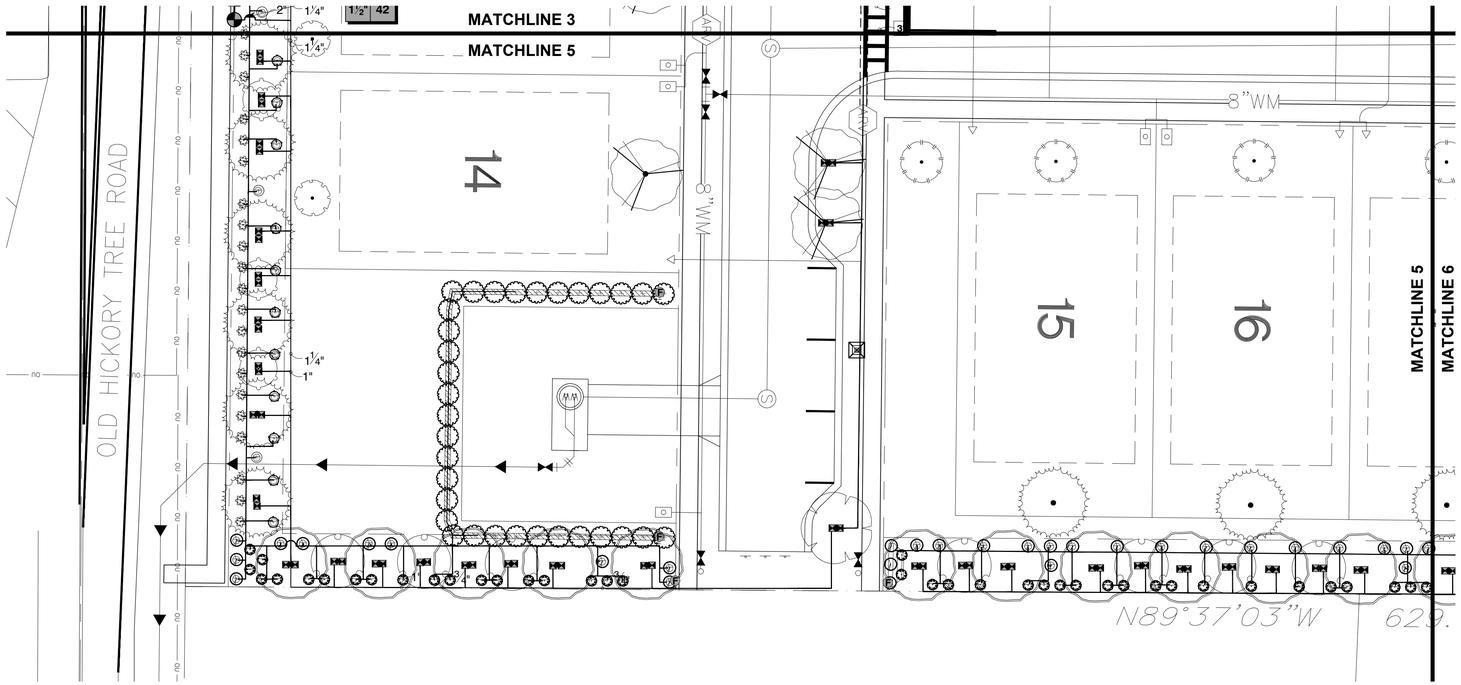
IRRIGATION PLAN

SHEET NUMBER:

LI104



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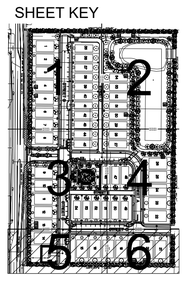

SCALE: 1" = 20'

NORTH

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CLERMONT, FL 34711

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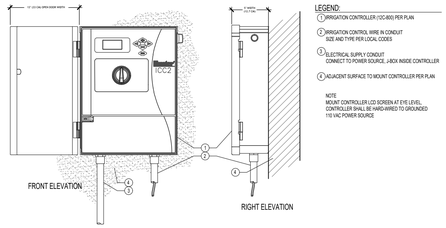
SHEET TITLE:

IRRIGATION PLAN

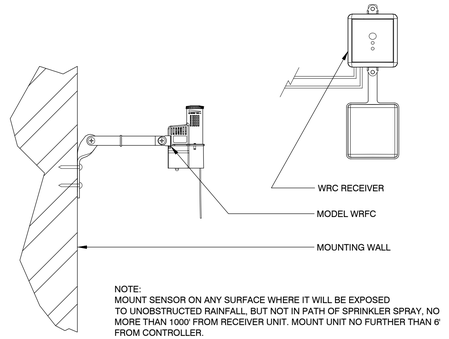
SHEET NUMBER:

LI105



1 HUNTER ICC-2 CONTROLLER

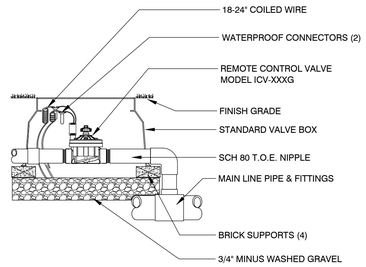
nts — P-CO-01



NOTE:
MOUNT SENSOR ON ANY SURFACE WHERE IT WILL BE EXPOSED TO UNOBSTRUCTED RAINFALL, BUT NOT IN PATH OF SPRINKLER SPRAY. NO MORE THAN 1000' FROM RECEIVER UNIT. MOUNT UNIT NO FURTHER THAN 6' FROM CONTROLLER.

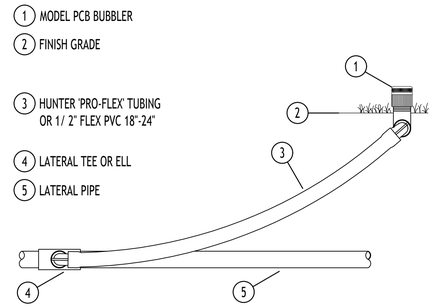
2 WIRELESS RAIN/FREEZE-CLIK

3" = 1'-0" — FX-IR-HUNT-SENS-18



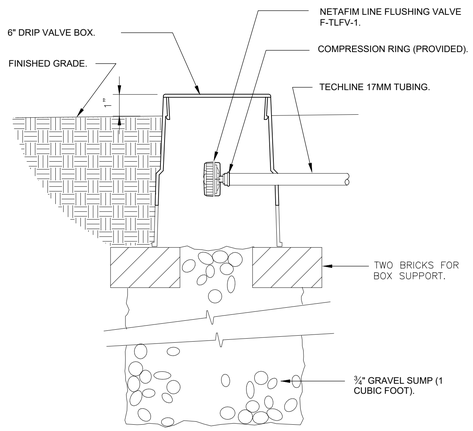
3 ICV GLOBE VALVE

NTS — FX-IR-HUNT-VALV-20



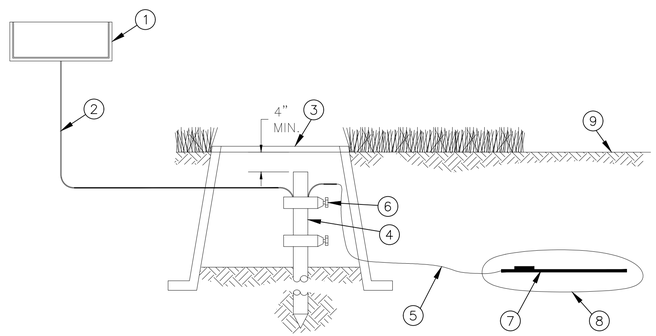
4 HUNTER PCB BUBBLER

NTS — P-HU-01



5 NETAFIM TECHLINE FLUSH VALVE

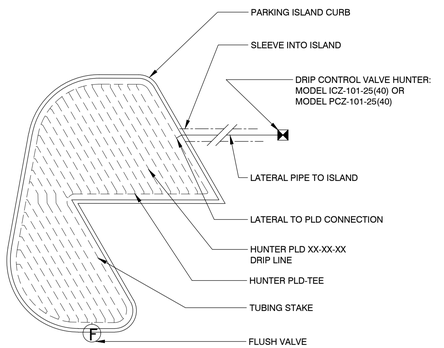
3" = 1'-0" — FX-IRRG-NETA-DRIP-01



1. CONTROLLER
2. SOLID BARE COPPER WIRE (#10 AWG) FROM GROUNDING ROD TO CONTROLLER. AS SHORT AND STRAIGHTS AS POSSIBLE
3. COVER GROUNDING ROD WITH #10 ROUND VALVE BOX AS SHOWN
4. 5/8–INCH X 10 FT COPPER CLAD GROUNDING ROD OR GROUNDING PLATE. INSTALL RODS IN SOIL IN A TRIAGULAR PATTERN SPACED A MINIMUM OF 16 FT APART FROM EACH OTHER. GROUNDING GRID TO HAVE A RESISTANCE OF TEN (10) OHMS OR LESS
5. BARE COPPER WIRE (#6 AWG MIN.) BETWEEN GROUNDING ROD AND GROUNDING PLATE
6. GROUND ROD CLAMP OR WELDS
7. COPPER GROUNDING PLATE
8. GROUND ENHANCEMENT MATERIAL (IF REQUIRED)
9. FINISH GRADE

6 GROUNDING PLATE AND ROD

1" = 1" — P-CO-24



7 IRREGULAR ISLAND A

1" = 1'-0" — FX-IR-HUNT-MICR-19

CLIENT:

VISTA GRAND PROPERTIES, LLC

3534 MEDITERRA DRIVE
CLERMONT, FL 34711

PROJECT:

OLD HICKORY TREE ESTATES

LOCATION:

OLD HICKORY TREE RD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

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REVISIONS	DATE

DESIGNED BY: KAV
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CHECKED BY: KAV
DATE: 05-13-2025

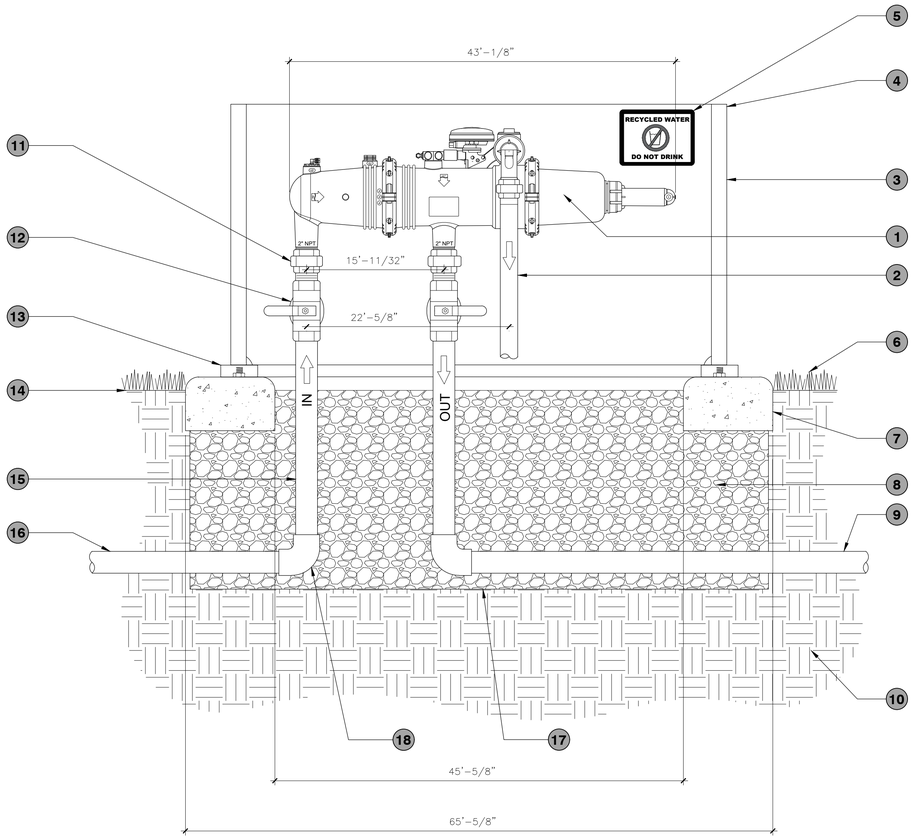
PROJECT NUMBER: 20240913OHE

SHEET TITLE:

IRRIGATION DETAILS

SHEET NUMBER:

LI201



1. 2" ON LINE MINI SIGMA UNIT
2. 11/2" GALVANIZED PIPE DISCHARGE PIPE "OPEN TO ATMOSPHERE"
3. 52"L, 30"H, XX"W
4. STRONGBOX SBBC-52AL
5. RECYCLED WATER STICKER DO NOT DRINK
6. LANDSCAPE
7. 6"X10" CONCRETE PAD
8. 3/4" CRUSHED GRAVEL SUMP BOX
9. MAINLINE
10. NATIVE SOIL
11. 2" BRASS UNION/ NIPPLE
12. 2" BRASS GATE VALVE
13. SECURED SWIVEL MOUNTING PLATES
14. FINISH GRADE
15. 2" GALVANIZED NIPPLE
16. 2" CLASS 315 PVC PIPE
17. LANDSCAPE FABRIC
18. 2" GALVANIZED ELBOW

8 2" ON LINE MINI SIGMA

1 1/2" = 1'-0"

FX-IR-AMI-FILT-05

CLIENT:

VISTA GRAND PROPERTIES, LLC

3534 MEDITERRA DRIVE
CLERMONT, FL 34711

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CHECKED BY: KAV
DATE: 05-13-2025

PROJECT NUMBER: 20240913OHE

SHEET TITLE:

IRRIGATION DETAILS

SHEET NUMBER:

LI202

LANDSCAPE CALCULATIONS & REQUIREMENTS FOR ST. CLOUD

ZONING & USE

SITE PARCEL ID(s):

19-26-31-4950-0001-0020
19-26-31-4950-0001-0150
19-26-31-4950-0001-0155
19-26-31-4950-0001-0180

△1 FUTURE LAND USE: MEDIUM DENSITY RESIDENTIAL

NOTES:

LANDSCAPE BUFFERS

BUFFERING ADJACENT PROPERTIES (PER P.U.D.)

NORTH BUFFER (±605')
15' WIDE

4 LARGE TREES PER 100 LF	= 25 LARGE TREES REQUIRED = 25 LARGE TREES PROVIDED
2.5 MEDIUM/SMALL TREES PER 100 LF	= 16 MED/SM TREES REQUIRED = 16 MED/SM TREES PROVIDED
23 SHRUBS PER 100 LF	= 140 SHRUBS REQUIRED = 140 SHRUBS PROVIDED

EAST BUFFER (±875')
15' WIDE

4 LARGE TREES PER 100 LF	= 35 LARGE TREES REQUIRED = 35 LARGE TREES PROVIDED
2.5 MEDIUM/SMALL TREES PER 100 LF	= 22 MED/SM TREES REQUIRED = 22 MED/SM TREES PROVIDED
23 SHRUBS PER 100 LF	= 202 SHRUBS REQUIRED = 202 SHRUBS PROVIDED

SOUTH BUFFER (±562')
15' WIDE

4 LARGE TREES PER 100 LF	= 23 LARGE TREES REQUIRED = 23 LARGE TREES PROVIDED
2.5 MEDIUM/SMALL TREES PER 100 LF	= 15 MED/SM TREES REQUIRED = 15 MED/SM TREES PROVIDED
23 SHRUBS PER 100 LF	= 130 SHRUBS REQUIRED = 130 SHRUBS PROVIDED

WEST BUFFER (±837')
15' WIDE

4 LARGE TREES PER 100 LF	= 34 LARGE TREES REQUIRED = 35 LARGE TREES PROVIDED
2.5 MEDIUM/SMALL TREES PER 100 LF	= 21 MED/SM TREES REQUIRED = 21 MED/SM TREES PROVIDED
23 SHRUBS PER 100 LF	= 193 SHRUBS REQUIRED = 194 SHRUBS PROVIDED

NOTES:

MINIMUM CANOPY REQUIREMENTS

NEW DEVELOPMENT (PER SEC. 4.8.10.)

54 LOTS 2 TREES PER LOT	= 108 TREES REQUIRED = 108 TREES PROVIDED

MINIMUM CANOPY REQUIREMENTS

NEW DEVELOPMENT (PER SEC. 4.8.10.)

60 CALIPER INCHES / ACRE REQUIRED CALIPER INCHES (60 INCHES x 14.4 ACRES) 307 TREES PROVIDED @ 3 INCH CAL. EACH 116 TREES PROVIDED @ 2.5 INCH CAL. EACH 14 TREES PROVIDED @ 2 INCH CAL. EACH	= 864 CALIPER INCHES REQUIRED = 921 CAL. INCHES = 290 CAL. INCHES = 28 CAL. INCHES = 1,239 TOTAL CAL/DBH INCHES PROVIDED > 864 CAL. INCHES REQUIRED

GENERAL PLANTING REQUIREMENT

REQUIRED TREE SIZES (PER SEC. 4.8.11.)

MINIMUM 70% OF REQUIRED TREES TO BE LARGE/MEDIUM SIZE TOTAL REQUIRED TREES LARGE/MEDIUM TREES % OF LARGE/MEDIUM TREES	= 437 TREES REQUIRED = 422 LARGE/MED. TREES PROVIDED = 97% > MIN. 70%

PLANT SCHEDULE

SYMBOL	CODE	QTY	COMMON / BOTANICAL NAME	SIZE	SPECIFICATION
TREES					
	ARF	43	FLORIDA FLAME RED MAPLE ACER RUBRUM 'FLORIDA FLAME'	65 GAL. / 3" CAL.	10-11` HT. X 2-3` SP.
	CF	18	SCRUB WILD OLIVE CARTREMA FLORIDANA	45 GAL. / 2.5" CAL.	8-10` HT. X 4-5` SP.
	CFL	5	SCRUB HICKORY CARYA FLORIDANA	45 GAL. / 2.5" CAL.	8-10` HT. X 4-5` SP.
	CL	34	SUGAR HACKBERRY CELTIS LAEVIGATA	65 GAL. / 3" CAL.	10-11` HT. X 4-5` SP.
	IV	14	YAUPON HOLLY ILEX VOMITORIA	45 GAL. / 2" CAL.	4-5' HT. X 2-3' SP., STANDARD, FEMALE WITH BERRIES
	NS	15	SOUR GUM NYSSA SYLVATICA	65 GAL. / 3" CAL.	8-10` HT. X 4-5` SP.
	PA	31	CHICKASAW PLUM PRUNUS ANGUSTIFOLIA	45 GAL. / 2.5" CAL.	4-5' HT. X 2-3' SP., TREE FORM, DIOECIOUS, PLANT 1 MALE AND 12 FEMALE
	PO	58	AMERICAN SYCAMORE PLATANUS OCCIDENTALIS	65 GAL. / 3" CAL.	10-11` HT. X 4-5` SP.
	PP	55	LONGLEAF PINE PINUS PALUSTRIS	65 GAL. / 3" CAL.	10-11` HT. X 3-4` SP.
	QI	22	BLUEJACK OAK QUERCUS INCANA	65 GAL. / 3" CAL.	10-11` HT. X 3-4` SP.
	QL	40	TURKEY OAK QUERCUS LAEVIS	45 GAL. / 2.5" CAL.	8-10` HT. X 4-5` SP.
	QVC	23	CATHEDRAL™ LIVE OAK QUERCUS VIRGINIANA 'SDLN'	65 GAL. / 3.25" CAL.	13-14` HT. X 4-5` SP. △2
	ST	22	TOUGH BUCKTHORN SIDEROXYLON TENAX	45 GAL. / 2.5" CAL.	6-7` HT. X 3-4` SP.
	UA	19	WINGED ELM ULMUS ALATA	65 GAL. / 3" CAL.	11-12` HT. X 4-5 SP. △1
SHRUBS					
	AO	71	FLAG PAWPAW ASIMINA OBOVATA	3 GALLON	12" HT. X 12" SP.
	CA	194	AMERICAN BEAUTYBERRY CALLICARPA AMERICANA	3 GALLON	24" HT. X 12" SP.
	HPC	49	CALUSA FIRE BUSH HAMELIA PATENS 'CALUSA'	3 GALLON	42" HT. X 36` SP.
	IVC	121	CAROLINA RUBY YAUPON HOLLY ILEX VOMITORIA 'CAROLINA RUBY'	3 GALLON	18" HT. X 12" SP.
	IVS	12	SCHILLINGS DWARF YAUPON HOLLY ILEX VOMITORIA 'SCHILLINGS DWARF'	3 GALLON	12" HT. X 18" SP.
	PN	102	WILD COFFEE PSYCHOTRIA NERVOSA	3 GALLON	18" HT. X 12" SP.
	RH	69	ROUGE PLANT RIVINA HUMILIS	3 GALLON	12" HT. X 12" SP.
	VOR	59	RAULSTON HARDY WALTER'S VIBURNUM VIBURNUM OBOVATUM 'RAULSTON HARDY'	3 GALLON	12" HT. X 18" SP.
	ZI	38	COONTIE ZAMIA INTEGRIFOLIA	3 GALLON	10" HT. X 12" SP.
ORNAMENTAL GRASSES					
	MC	82	PINK MUHLY GRASS MUHLENBERGIA CAPILLARIS	1 GALLON	12" HT. X 12" SP.

NOTES:

1. TREES TO BE INSTALLED AFTER LOTS ARE BUILT.
2. TREES TO BE INSTALLED CLEAR OF UTILITIES.
3. MULCH BELOW ALL TREES AND SHRUBS. TREES WITHIN SOD WILL HAVE 6 FT. DIAMETER MULCH RING.
4. IN AREAS WITHOUT PROPOSED PLANTS, INSTALL BAHIA SOD, PASPALUM NOTATUM 'ARGENTINE'. CONTRACTOR TO VERIFY SOD QUANTITIES.
5. CONTRACTOR TO COORDINATE WITH LANDSCAPE ARCHITECT (321) 338-4781. ALL PLANTS MUST BE LAID OUT IN FIELD AND APPROVED PRIOR TO PLANTING.
6. IF THERE IS A DISCREPANCY BETWEEN PLANTS ON THE PLAN(S) AND PLANTS IN THE PLANT SCHEDULE, THE PLANT SCHEDULE WILL PREVAIL.
7. SELECTIVE PRUNING ONLY FOR PLANT WITH DEAD, DISEASED, OR CROSSING BRANCHES. NEVER SHEAR ANY TREE OR SHRUB.
8. TREES PLANTED NEAR PUBLIC SIDEWALKS AND INFRASTRUCTURE WILL HAVE ROOT BARRIER INSTALLED. SEE DETAIL ON SHEET LP201.

△1

ALL PROPOSED PLANT MATERIAL IS NATIVE

PROPOSED TREES

Tree	Qty	Cal	Size	Total Cal Inches
ACER	43	3	LARGE	129
CARTREMA	18	2.5	MED	45
CARYA	5	2.5	MED	13
CELTIS	43	3	LARGE	129
ILEX	14	2	SMALL	28
NYSSA	15	3	LARGE	45
PLATANUS	58	3	LARGE	174
PINUS	55	3	LARGE	165
PRUNUS	31	2.5	MED	78
QUERCUS	35	3	LARGE	105
QUERCUS	40	2.5	MED	100
QUERCUS	23	3	LARGE	69
SIDEROXYLON	22	2.5	MED	55
ULMUS	35	3	LARGE	105
TOTAL	**437**			**1239**

PROPOSED TREES - GENUS PERCENTAGE

Tree	Qty	Total Qty	Total %
ACER	43	437	9.8%
CARTREMA	18	437	4.1%
CARYA	5	437	1.1%
CELTIS	43	437	9.8%
ILEX	14	437	3.2%
NYSSA	15	437	3.4%
PLATANUS	58	437	13.3%
PINUS	55	437	12.6%
PRUNUS	31	437	7.1%
QUERCUS	35	437	8.0%
QUERCUS	40	437	9.2%
QUERCUS	23	437	5.3%
SIDEROXYLON	22	437	5.0%
ULMUS	35	437	8.0%
TOTAL	**437**		**100.0%**

△2

CLIENT:

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REVISIONS	DATE
△1 COUNTY COMMENTS	3-28-2025
△2 COUNTY COMMENTS	4-22-2025
△3 PLANT SPEC CHANGE	7-24-2025

DESIGNED BY: KAV
DRAWN BY: ECP
CHECKED BY: KAV
DATE: 09-17-2025

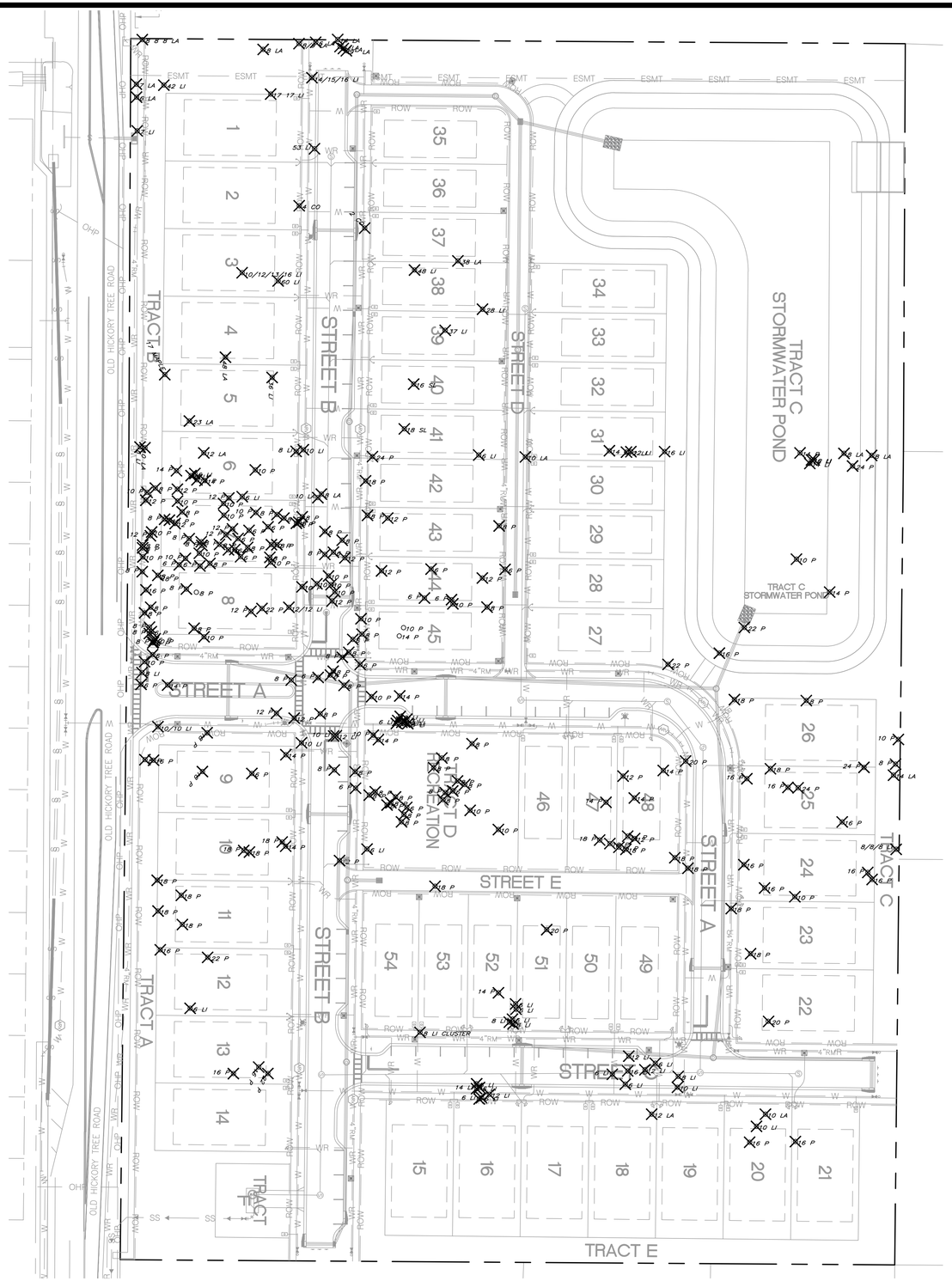
PROJECT NUMBER: 20240913OHE

SHEET TITLE:

LANDSCAPE REQUIREMENTS & PLANT SCHEDULE

SHEET NUMBER:

LP001



LEGEND:

EXISTING TREE TO BE REMOVED

Existing Native/Exotic/Invasive Trees

REMAIN

Genus	Quantity	DBH
Coconut Palm	0	0
Laurel Oak	0	0
Live Oak	0	0
Longleaf Pine	0	0
Maple	0	0
Slash Pine	0	0
TOTAL	**0**	**0**

REMOVE

Genus	Quantity	DBH
Coconut Palm	2	6
Laurel Oak	23	282
Live Oak	63	826
Longleaf Pine	198	2,102
Maple	1	17
Slash Pine	2	34
TOTAL	**289**	**3,267**

Know what's **below.** **Call** before you dig. Dial 811 Or Call 800-282-7411

50 0 25 50 100

SCALE: 1" = 50'

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REVISIONS	DATE

DESIGNED BY: KAV
DRAWN BY: ECP
CHECKED BY: KAV
DATE: 09-17-2025

PROJECT NUMBER: 20240913OHE

SHEET TITLE:

TREE REMOVAL PLAN

SHEET NUMBER:

LP002

LANDSCAPE INSTALLATION NOTES:

1. **SITE CONDITIONS** CONTRACTOR SHALL FAMILIARIZE HIMSELF/HERSELF WITH EXISTING SITE CONDITIONS PRIOR TO BIDDING AND INITIATING PLANTING. ALL EXISTING SITE FURNISHINGS, PAVING, LANDSCAPE, TREES AND OTHER ELEMENTS TO REMAIN SHALL BE PROTECTED FROM ANY DAMAGE. ALL INSTALLATION OF PLANT MATERIAL SHALL COMPLY WITH APPLICABLE JURISDICTIONAL CODES. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS ASSOCIATED WITH THIS WORK. CONTRACTOR TO REPAIR ALL DAMAGE DONE TO PROPERTY DURING DEMOLITION, RELOCATION AND/OR INSTALLATION ACTIVITIES AS THEIR SOLE EXPENSE.

2. **FIELD CONDITIONS** THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND LOCATION OF PROPOSED IMPROVEMENTS PRIOR TO INITIATING ANY CONSTRUCTION. REPORT ANY DISCREPANCIES OR CONFLICTS BETWEEN THE CONSTRUCTION DRAWINGS AND FIELD CONDITIONS TO THE LANDSCAPE ARCHITECT IMMEDIATELY. SEE CIVIL ENGINEERING DRAWINGS FOR GENERAL GRADING OF THE SITE, INCLUDING FINISH GRADES FOR PARKING LOTS, ROADWAYS, SIDEWALKS AND PLANTING AREAS. ALL GRADES, DIMENSIONS AND EXISTING CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR ON-SITE BEFORE CONSTRUCTION AND/OR FABRICATION BEGINS. ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DRAWINGS AND THE FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. MAINTAIN A MINIMUM OF 5 FEET HORIZONTAL SEPARATION BETWEEN ALL TREE AND SHRUB ROOT BALLS FROM ALL TWA MAINTAINED UTILITIES.

3. **UNIT PRICING** THE CONTRACTOR SHALL PROVIDE UNIT PRICES AND INCLUDE THE TOTAL COST OF THE WORK TO INSTALL THE PROJECT INCLUDING BUT NOT LIMITED TO EQUIPMENT, MATERIAL, PRODUCTS, GUARANTEES, LABOR, INSTALLATION, PLANTING SOIL MIX, MULCH, AND SO FORTH TO PROVIDE A COMPLETE JOB AS OUTLINED ON THE DRAWINGS. THE OWNER SHALL HAVE THE OPTION TO ADD OR DEDUCT FROM THE LUMP SUM BID CONTRACT AMOUNT, BASED ON THE QUOTED UNIT PRICES FOR ANY OF THE ITEMS LISTED IN THE "PLANT LIST". IN THE EVENT OF VARIATION BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND THE PLANS, THE PLANS SHALL CONTROL. THE CONTRACTOR SHALL VERIFY ALL QUANTITIES AND REPORT ANY DISCREPANCIES AT THE TIME OF BIDDING. PROVIDE PRODUCT SUBMITTALS TO LANDSCAPE ARCHITECT. IF THERE IS A DISCREPANCY BETWEEN PLANTS ON PLAN(S) AND PLANTS IN THE PLANT SCHEDULE, THE PLANT SCHEDULE SHOULD PREVAIL.

4. **COORDINATION WITH OTHER TRADES** THE WORK SHALL BE COORDINATED WITH OTHER TRADES, INCLUDING IRRIGATION AND ELECTRICAL TO PREVENT CONFLICTS. CARE SHALL BE TAKEN TO AVOID BURIED AND OVERHEAD UTILITIES. CONTRACTOR RESPONSIBLE FOR KNOWING ALL UTILITY LOCATIONS.

5. **UTILITY LOCATIONS** THE CONTRACTOR SHALL REVIEW ARCHITECTURE/ENGINEERING PLANS TO BECOME THOROUGHLY FAMILIAR WITH SURFACE AND SUBSURFACE UTILITIES. LOCATION OF ALL UTILITIES AND BASE INFORMATION IS APPROXIMATE. CONTRACTOR SHALL NOTIFY ALL NECESSARY UTILITY COMPANIES 48 HOURS MINIMUM PRIOR TO DIGGING FOR VERIFICATION OF ALL UNDERGROUND UTILITIES, IRRIGATION AND ALL OTHER OBSTRUCTIONS AND COORDINATE WITH OWNER'S REPRESENTATIVE PRIOR TO INITIATING INSTALLATION. CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR OR REPLACE ANY DAMAGE COMMITTED TO EXISTING ELEMENTS OR UTILITIES ABOVE OR BELOW GROUND TO ITS ORIGINAL CONDITION AND TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.

CONTRACTOR SHALL FIELD ADJUST LOCATION OF PLANT MATERIAL AS NECESSARY TO AVOID DAMAGE TO EXISTING UNDERGROUND UTILITIES AND/OR EXISTING ABOVE GROUND ELEMENTS. ALL CHANGES REQUIRED SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE AND SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE.

MAINTAIN A MINIMUM OF 5 FEET HORIZONTAL SEPARATION BETWEEN ALL TREE AND SHRUB ROOTS AND ALL TWA MAINTAINED UTILITIES.

6. **ROUGH GRADING** THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ROUGH GRADING THE SITE TO WITHIN +/- 0.10 FT. OF GRADES SHOWN ON GRADING PLANS. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR FINISH GRADES IN ALL LANDSCAPE AREAS. CONTRACTOR TO APPROVE ALL GRADED AREAS PRIOR TO PLANTING.

7. **DRAINAGE PERCOLATION TESTING** CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE TO DRAINAGE AS INDICATED ON THE GRADING DRAWINGS. CONTRACTOR SHALL INSURE VERTICAL DRAINAGE AND PERCOLATION OF ALL PLANTING AREAS PRIOR TO INSTALLATION. PERFORM PERCOLATION TESTS IN SEPARATE AREAS OF THE PROJECT SITE. WATER MUST BE ABLE TO PENETRATE AND MOVE THROUGH SOIL; ONE INCH PER HOUR IS CONSIDERED OPTIMAL. IF WATER REMAINS FOR MORE THAN 24 HOURS, IMMEDIATELY NOTIFY THE LANDSCAPE ARCHITECT. PERCOLATION TEST RESULTS SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT. VERTICAL DRILLING THROUGH ANY COMPACTED FILL TO NATIVE SOIL SHALL BE ACCOMPLISHED TO AID DRAINAGE IF NECESSARY. IF INADEQUATE VERTICAL DRAINAGE IS ENCOUNTERED, THE CONTRACTOR SHALL SUBMIT RECOMMENDATIONS FOR PROVIDING ADEQUATE DRAINAGE TO THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT.

8. **SOIL TESTING** THE CONTRACTOR SHALL BEAR ALL COSTS OF SOIL TESTING AND REQUIRED SOIL AMENDMENTS ASSOCIATED WITH THE WORK PRIOR TO COMMENCEMENT OF LANDSCAPE INSTALLATION. THE CONTRACTOR SHALL PROVIDE COMPLETE SOIL TESTS FOR AT LEAST THREE SEPARATE AREAS UNDISTURBED BY PREVIOUS WORK AND TWO AREAS DISTURBED AND/OR REFILLED. CONTACT LANDSCAPE ARCHITECT FOR SOIL TESTING LOCATIONS. CONTRACTOR SHALL ALERT LANDSCAPE ARCHITECT IF ANY UNUSUAL SOILS ARE DISCOVERED ON SITE. IF PH ADJUSTERS ARE NEEDED THE PREFERRED SUBSTANCES FOR ALTERATION ARE: LIME-COMMERCIAL GRADE GROUND OR HYDRATED LIMESTONE CONTAINING NOT LESS THAN 50% OF TOTAL OXIDES; ALUMINUM SULFATE - COMMERCIAL GRADE.

IMPORTED TOPSOIL: THE MANUFACTURERS ANALYSIS AND/OR PRODUCT LITERATURE SHALL BE SUBMITTED TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.

EXISTING TOPSOIL: FOLLOW TESTING PROCEDURES OUTLINES ABOVE TO ENSURE pH REQUIREMENTS, ORGANIC CONTENT AND PRESENCE OF OBJECTIONABLE MATERIAL ARE ALL NOTED.

9. **SOIL PREPARATION** ALL SOILS TO BE TILLED TO A DEPTH OF 12 INCHES MINIMUM. REMOVE STONES MEASURING OVER 1 ½ INCHES IN ANY DIMENSION. REMOVE STICKS, RUBBISH, LIMEROCK AND OTHER EXTRANEOUS MATTER. THE CONTRACTOR SHALL PROVIDE AN APPROVED PLANTING SOIL MIXTURE FOR ALL PLANT MATERIAL. SEE LANDSCAPE INSTALLATION DETAILS FOR SOIL MIXTURE RECIPE.

TOPSOIL SHALL BE NATURAL, FRIABLE, FERTILE, FINE LOAMY SOIL POSSESSING CHARACTERISTICS OF REPRESENTATIVE TOPSOIL IN THE VICINITY THAT PRODUCES HEAVY GROWTH. TOPSOIL SHALL HAVE A ph RANGE OF 5.5 TO 7.4, FREE FROM SUBSOIL, OBJECTIONABLE WEEDS, LITTER, STIFF CLAY, STONES LARGER THAN ONE INCH DIAMETER, STUMPS, ROOTS, TRASH, TOXIC SUBSTANCES OR ANY OTHER DELETERIOUS MATERIAL WHICH MAY BE HARMFUL TO PLANT GROWTH OR HINDER PLANTING OPERATIONS. TOPSOIL SHALL CONTAIN A MINIMUM OF THREE PERCENT ORGANIC MATERIAL.

10. **PARKING AREA EXCAVATION** PARKING AREA LANDSCAPE ISLANDS SHALL BE EXCAVATED OF ALL ROADWAY BASE MATERIAL (MINIMUM DEPTH OF 24 INCHES) AND BACK FILLED WITH APPROVED PLANTING SOIL MIX. SUPER LOAM PLANTING MIX (80% TOPSOIL PLANTING MIX, 20% COMPOST).

11. **BIOCHAR** AND **BIOSOLIDS** ARE BENEFICIAL SOIL ADDITIVES THAT HELP PROMOTE PLANT GROWTH AND ARE RECOMMENDED FOR USE IN THE LANDSCAPE BEDS AT THE TIME OF PLANT INSTALLATION.

A. ORDER ONLINE: WWW.BIOCHARNOW.COM
B. APPLICATION: USE 'SAND SIZE' AT A RATE OF 1 CUBIC FOOT PER 20 SQUARE FEET OF PLANTING AREA.

12. **NO PLANT SUBSITUTIONS ALLOWED** NO PLANT SUBSTITUTIONS WILL BE ACCEPTED WITHOUT WRITTEN APPROVAL BY THE LANDSCAPE ARCHITECT. CONTRACTOR SHALL SUBMIT TO THE LANDSCAPE ARCHITECT PROOF OF NON-AVAILABILITY AND A PROPOSAL FOR EQUIVALENT MATERIAL.

13. **PLANTING**

A. THE PLANT QUANTITIES SHOWN ON THE LANDSCAPE PLANS ARE FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES AND REPORTING ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT FOR CLARIFICATION PRIOR TO CONTRACT AWARD AND COMMENCEMENT OF WORK.

B. PRIOR TO PLANTING INSTALLATION, THE CONTRACTOR SHALL CONFIRM THE AVAILABILITY OF ALL THE SPECIFIED PLANT MATERIALS AND MAKE ARRANGEMENTS WITH THE LANDSCAPE ARCHITECT TO REVIEW PLANT MATERIAL.

C. THE CONTRACTOR IS RESPONSIBLE FOR ERADICATING WEEDS AND GRASS WITHIN THE LIMITS OF THE PLANTING AREAS PRIOR TO BEGINNING LANDSCAPE INSTALLATION. PERENNIAL WEEDS AND GRASSES TO BE REMOVED INCLUDE, BUT ARE NOT LIMITED TO, NUT GRASS, PUNCTURE VINE, MORNING GLORY, TORPEDO GRASS, BERMUDA GRASS, BAHIA GRASS, CRAB GRASS AND OTHER NOXIOUS AND/OR INVASIVE WEEDS. THE SITE IS TO BE MAINTAINED WEED FREE THROUGHOUT PLANTING OPERATIONS. TO PREPARE THE PLANTING AREAS, SPRAY HERBICIDE WITH MANUFACTURER'S RECOMMENDATIONS, WAIT TWO WEEKS, SPRAY A SECOND TIME, WAIT TWO WEEKS, SPRAY A THIRD TIME.

D. UPON ARRIVAL, PLANTS SHALL BE PROTECTED AT THE SITE BY BEING THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. ALL TREES SHALL BE INSTALLED WITHIN 72 HOURS OF DELIVERY.
E. LABEL AT LEAST ONE PLANT OF EACH SPECIES WITH A SECURELY ATTACHED WATERPROOF TAG BEARING THE BOTANICAL NAME.

F. ALL PLANTS THAT DO NOT CONFORM TO SPECIFICATIONS WILL BE REJECTED. ANY PLANTS IN SHOCK (WITH DEAD OR DYING LEAVES), HAVE ROOTS THAT ARE SEVERELY BOUND IN THE CONTAINER OR THAT ARE DEAD WILL BE REJECTED. CONTAINER GROWN PLANTS SHOULD HAVE SUFFICIENT ROOTS TO HOLD THE CONTAINER SOIL TOGETHER AFTER REMOVAL FROM THE CONTAINER.

LANDSCAPE INSTALLATION NOTES CONT'D:

G. IRRIGATION MUST BE INSTALLED BEFORE PLANTS ARE PLANTED. PLANT PLANTS FLUSH WITH FINISHED GRADE SOIL. BACK FILL WITH SOIL IN 12 INCH LAYERS. WATER IN AND COMPACT EACH LAYER TO ELIMINATE AIR VOIDS. IMMEDIATELY APPLY AT LEAST 2 INCHES OF WATER. AFTER PLANTING, REMOVE EXCESS SOIL AND RAKE PLANT BEDS TO A SMOOTH EVEN SURFACE. AT THE PLANTING BED EDGES, TAPER SOIL GRADE DOWN TO A LEVEL BELOW THE TOP OF THE ADJACENT STRUCTURE OR LAWN TO ALLOW FOR A 3 INCH LAYER OF MULCH.

H. ALL SOD PLANTED WITH NO GAPS BETWEEN SOD PIECES, ROLLED AND SEEMS SHALL BE SANDED AFTER INSTALLATION. PEG ALL SOD ON SLOPES GREATER THAN 3:1

I. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY AND PLUMB CONDITION OF ALL TREES AND SHRUBS AND SHALL BE LEGALLY LIABLE FOR ANY DAMAGE CAUSED BY INSTABILITY OF ANY PLANT MATERIALS. STAKING OF TREES OR SHRUBS SHALL BE DONE IN ACCORDANCE WITH PLANS AND SPECIFICATIONS.

J. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION PROTECTION AND SLOPE STABILIZATION BY OWNER-APPROVED METHODS.

K. ALL PLANTS AND PLANTING AREAS SHALL BE TOP DRESSED WITH 3 INCHES OF PINE STRAW MULCH. ALL TREES SHALL HAVE A 3 INCH THICK, 36 INCH RADIUS (FROM THE TRUNK) MULCH RING PLACED AROUND THE BASE OF THE TRUNK. PERENNIALS AND GROUNDCOVER 1 1/2 INCHES MULCH.

L. IRRIGATION TO BE INSTALLED BEFORE PLANTING INSTALLATION BEGINS. CONTRACTOR SHALL COORDINATE ALL PLANTING WORK WITH IRRIGATION WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HAND WATERING AS REQUIRED TO SUPPLEMENT IRRIGATION WATERING AND RAINFALL. CONTRACTOR SHALL BE RESPONSIBLE FOR HAND WATERING IN ALL PLANTING AREAS, REGARDLESS OF THE STATUS OF EXISTING OR PROPOSED IRRIGATION.

M. CONTRACTOR SHALL RE-GRADE ALL AREAS DISTURBED BY PLANT REMOVAL, RELOCATION AND/OR INSTALLATION WORK.

N. ALL TREE AND SHRUB ROOTBALLS SHALL BE A MINIMUM OF 5 FEET HORIZONTAL SEPARATION FROM ANY UTILITY.

O. ALL TREES, SHRUBS, AND GROUNDCOVER SHALL BE PLANTED FLUSH WITH FINISHED GRADE.

14. **TREES**

A. IRRIGATION MUST BE INSTALLED BEFORE TREES ARE PLANTED.

B. PLANT TREES WITH THE ROOTBALL FLUSH WITH THE FINISHED GRADE SOIL. DO NOT PLACE SOIL OR MULCH ON TOP OF THE ROOTBALL. BEFORE PLANTING, EXPOSE THE ROOT FLARE OF EACH TREE. RESTORE GRADE AT BASE OF TRUNK TO ACTUAL ROOT FLARE ELEVATION. DO NOT MOUND MULCH OR SOIL AGAINST ROOT FLARE OF TRUNK; REMOVE WIRE BASKET AND BURLAP ON ALL SIDES OF ROOTBALL TO EXPOSE ROOTS TO SOIL.

C. ALL TREES WITHIN SOD AREAS AND GROUNDCOVER AREAS TO RECEIVE A 4 FOOT RADIUS (FROM THE TRUNK) AREA OF PINE STRAW MULCH. DO NOT MOUND MULCH AGAINST ROOT FLARE OR TRUNKS OF TREES OR SHRUBS.

D. TREES WITH GIRDLING ROOTS, BROKEN ROOTBALLS, WOUNDS, BARK INJURIES ON THE MAJOR TRUNKS, TIP DIE BACK OR IN SHOCK (WITH DEAD OR DYING LEAVES) WILL BE REJECTED.

E. IF TREES ARE DELIVERED IN METAL BASKETS, REMOVE THE TOP 2/3 OF THE METAL BASKETS AND BURLAP JUST PRIOR TO PLANTING. IF TREES ARE BURIED IN THE FULL METAL BASKETS, A FINE OF $2,000 PER TREE WILL BE IMPOSED BY THE OWNER.

F. BALLED AND BURLAP TREES SHOULD BE DUG AND PREPARED FOR SHIPMENT IN A MANNER THAT WILL NOT DAMAGE ROOTS, BRANCHES, SHAPE AND FUTURE DEVELOPMENT AFTER PLANTING. IN AS MUCH AS POSSIBLE, CONTRACTOR TO ENSURE THAT TREES SHOULD BE ROOT PRUNED A MINIMUM OF 30 DAYS PRIOR TO DIGGING AND HARDENED OFF AT THE NURSERY FOR A MINIMUM OF 30 DAYS PRIOR TO SHIPPING. IN ADDITIONAL TO ROOTBALL IRRIGATION, THE NURSERY SHOULD PROVIDE OVERHEAD MIST IRRIGATION FOR THE DURATION OF THIS PERIOD. THE PRODUCT RECEIVED ON SITE SHOULD HAVE A FIRM BALL WITH NATURAL SOILS. DRIED, CRACKED OR BROKEN ROOTBALLS WILL BE REJECTED. ROOTBALLS SHOULD BE SIZED AT A MINIMUM DIAMETER RATIO OF 12 INCHES OF ROOTBALL FOR EACH 1 INCH OF TREE CALIPER. ALL FIELD GROWN TREES MUST BE FROM A 'ROOTS PLUS' GROWERS NURSERY.

G. AFTER EXCAVATION OF TREE PLANTING PIT, PLACE TREE IN PIT AND BACK FILL WITH SOIL IN 12 INCH LAYERS. WATER IN AND COMPACT EACH LAYER TO ELIMINATE AIR VOIDS. IMMEDIATELY APPLY AT LEAST 8 INCHES OF WATER. AFTER PLANTING, REMOVE EXCESS SOIL AND RAKE PLANT BEDS TO A SMOOTH EVEN SURFACE. RAKE SMOOTH AND THEN CREATE A 4 INCH HEIGHT SOIL SAUCER APPROXIMATELY 3 FEET RADIAL TO THE TRUNK.

H. PALM HEIGHTS ARE INDICATED AT THE PALM LOCATIONS ON THE PLANS. REFER TO CLEAR TRUNK (CT) SPECIFICATIONS ON THE PLANT SCHEDULE.

15. **INSPECTIONS**

A. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT A MINIMUM OF 7 DAYS IN ADVANCE OF THE PLANT MATERIAL DELIVERY TO THE SITE. THE LANDSCAPE ARCHITECT SHALL INSPECT THE PLANT MATERIAL **BEFORE** THE PLANTS AND TREES HAVE BEEN UNLOADED.

B. THE LANDSCAPE ARCHITECT SHALL HAVE THE RIGHT, AT ANY STAGE OF THE OPERATIONS, TO REJECT ANY AND ALL WORK AND/OR MATERIALS WHICH, IN HER OPINION, DO NOT MEET WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS.

C. TREE CALIPER SIZES NOTED ARE MINIMUM. ALL CONTAINER SIZES NOTED ARE MINIMUM; INCREASE SIZE, IF NECESSARY, TO PROVIDE PLANT HEIGHT AND SPREAD PER SPECIFICATIONS.

D. ALL INSTALLATION OF PLANT MATERIAL SHALL COMPLY WITH APPLICABLE JURISDICTIONAL CODES. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS ASSOCIATED WITH THIS WORK.

E. PRIOR TO PLANTING INSTALLATION, THE CONTRACTOR SHALL CONFIRM THE AVAILABILITY OF ALL THE SPECIFIED PLANT MATERIALS. SUBMIT DATED PHOTOGRAPHS OF TREE MATERIAL, PLANT MATERIAL AND SPECIMENS TO THE LANDSCAPE ARCHITECT FOR REVIEW. IF PLANT MATERIAL DOES NOT COMPLY WITH THE REQUIREMENTS AS SPECIFIED HEREIN, THE LANDSCAPE ARCHITECT AND OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT SUCH PLANTS AND REQUIRE THE CONTRACTOR TO REPLACE REJECTED MATERIALS OR WORK AND CONTINUE SPECIFIED MAINTENANCE UNTIL RE-INSPECTED AND FOUND TO BE ACCEPTABLE.

16. **PRE-INSTALLATION PLANT LAYOUT INSPECTION** CONTRACTOR SHALL LAYOUT ALL PLANT MATERIAL PRIOR TO INITIATING INSTALLATION FOR THE REVIEW AND APPROVAL OF THE LANDSCAPE ARCHITECT. THE LOCATION OF ALL PLANT MATERIAL IS SUBJECT TO FIELD CHANGE. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT A MINIMUM OF 5 WORKING DAYS TO SCHEDULE INPSECTION OF PLANT MATERIAL LAYOUT PRIOR TO PLANTING.

THE LOCATION OF PLANTS, AS SHOWN IN THESE PLANS, ARE APPROXIMATE. THE FINAL LOCATIONS MAY BE ADJUSTED TO ACCOMMODATE UNFORESEEN FIELD CONDITIONS, TO COMPLY WITH SAFETY CRITERIA, TO AVOID CREATING UNSAFE CONDITIONS, OR AS OTHERWISE DIRECTED BY THE LANDSCAPE ARCHITECT. ALL ADJUSTMENTS SHALL BE VERIFIED AND APPROVED BY THE LANDSCAPE ARCHITECT.

17. **TREE SAVE AREAS** ALL TREE SAVE AREAS SHALL BE COVERED WITH 3" OF PINE STRAW MULCH. IN AREAS WITH EXISTING PLANTS, CONTRACTOR SHALL EXERCISE CAUTION IN PLACING OF MULCH TO PROTECT PLANTS. DO NOT STORE OR USE MATERIALS OR EQUIPMENT WITHIN THE DRIPLINE OF ANY TREE TO BE RETAINED UNLESS THE ACTIVITY IS BEING DONE TO PROTECT TREES. CLEARING OF VEGETATION WITHIN THE DRIPLINE OF TREES DESIGNATED FOR PRESERVATION SHALL ONLY BE BY HAND OR LIGHT RUBBER WHEELED EQUIPMENT THAT WILL NOT DAMAGE TREE ROOTS. SEE TREE PROTECTION BARRICADE PLAN. A $1,000 PENALTY WILL BE APPLIED IF THESE GUIDELINES ARE NOT FOLLOWED.

18. **EXISTING VEGETATION TO REMAIN** ALL EXISTING VEGETATION TO REMAIN SHALL BE PROTECTED. ANY PLANT/TREE DAMAGED, SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. SEE TREE PROTECTION PLANS FOR DETAILS.

19. **STAKING** CONTRACTOR SHALL INSURE THAT ALL TREES ARE MAINTAINED STRAIGHT AND PLUMB. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PREVENT PLANTS AND TREES FROM FALLING OR BEING BLOWN OVER, TO RE-STRAIGHTEN AND REPLANT ALL PLANTS WHICH LEAN OR FALL AND TO REPLACE ALL PLANTS WHICH ARE DAMAGED DUE TO LACK OF GUYING OR STAKING. PLANTS BLOWN OVER BY HIGH WINDS UNDER 39 MPH SHALL NOT BE CAUSE FOR ADDITIONAL EXPENSE TO THE OWNER, BUT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. DAMAGED PLANTS SHALL BE BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. PLANTS BLOWN OVER BY HIGH WINDS DUE TO A TROPICAL STORM (39-73 MPH) OR A HURRICANE (74 MPH AND HIGHER) PER THE NATIONAL WEATHER SERVICE, THE CONTRACTOR SHALL NOT BE RESPONSIBLE AND THE OWNER SHALL PAY THE CONTRACTOR TO RE-GUY THE PLANTS.

20. **WATERING** IRRIGATION TO BE IN PLACE BEFORE LANDSCAPE INSTALLATION COMMENCES. ALL PLANTS SHALL BE THOROUGHLY WATERED AT TIME OF PLANTING AND KEPT ADEQUATELY WATERED UNTIL TIME OF FINAL INSPECTION ACCEPTANCE. BEGIN WATER ESTABLISHMENT PERIOD IMMEDIATELY. PROVIDE SUFFICIENT QUANTITY OF WATER TO SATURATE THE SOIL 18 INCHES DEEP AND THROUGHOUT THE PLANTING BACKFILL AREA DURING THE CONTRACT MAINTENANCE PERIOD. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HAND WATERING AS REQUIRED UNTIL PLANT MATERIALS ARE WELL ESTABLISHED, TO SUPPLEMENT IRRIGATION WATERING AND RAINFALL, AND SHALL BE RESPONSIBLE FOR HAND WATERING IN ALL LANDSCAPE AREAS WHERE THE EXISTING OR PROPOSED IRRIGATION IS FOR WHATEVER REASON NOT OPERATING OR NOT OPERATING CORRECTLY.

21. **CLEAN SITE** CONTRACTOR SHALL CLEAN THE WORK AREAS AT THE END OF EACH WORKING DAY. RUBBISH AND DEBRIS SHALL BE COLLECTED AND DESPOSED OF DAILY. ALL MATERIALS, PRODUCTS, AND EQUIPMENT SHALL BE STORED IN AN ORGANIZED FASHION AS DIRECTED BY THE OWNER'S REPRESENTATIVE.

LANDSCAPE INSTALLATION NOTES CONT'D:

22. **VEHICLE PARKING AND HOLDING AREA** CONTRACTOR AND EMPLOYEE VEHICLE PARKING AND LANDSCAPE HOLDING AREAS SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE.

23. **CONSTRUCTION ACCESS, SCHEDULING AND COORDINATION** CONSTRUCTION ACCESS SHALL BE INDICATED BY THE OWNER'S REPRESENTATIVE. COORDINATION OF HEAVY EQUIPMENT AND MATERIALS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING AND COORDINATION OF WORK WITH OTHER TRADES AND THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL COORDINATE ACCESS AND STAGING AREAS WITH THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL TAKE WHATEVER MEANS THAT MAY BE NECESSARY TO FULLY UNDERSTAND ALL THE ACCESS ROUTES AND CONSTRUCTION SCHEDULES IN ORDER TO PROVIDE A COMPLETE AND FINISHED PROJECT ON SCHEDULE. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING EROSION AND SEDIMENTATION CONTROL MEASURES DURING CONSTRUCTION. PROVIDE ADDITIONAL MEASURES AS NECESSARY TO MINIMIZE ADVERSE IMPACTS IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES.

24. **SAFETY** THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SAFETY MEASURES DURING CONSTRUCTION OPERATIONS TO PROTECT THE PUBLIC ACCORDING TO ALL APPLICABLE CODES AND PROFESSIONAL AND LOCAL PRACTICES.

LANDSCAPE MAINTENANCE NOTES:

1. **MAINTENANCE PRIOR TO INITIAL ACCEPTANCE**

A. BEGIN MAINTENANCE IMMEDIATELY AFTER PLANTING AND CONTINUE UNTIL FINAL ACCEPTANCE. MAINTENANCE SHALL BEGIN AFTER EACH PLANT HAS BEEN INSTALLED AND SHALL CONTINUE UNTIL THE DATE OF FINAL COMPLETION WHEN THE 365 DAY PLANT WARRANTY PERIOD BEGINS.

B. PLANT MAINTENANCE SHALL INCLUDE WATERING, WEEDING, CULTIVATING, MULCHING, TIGHTENING AND REPAIRING OF GUYS, REPLACEMENT OF SICK OR DEAD PLANTS, RESETTING PLANTS, RESETTING PLANTS TO PROPER GRADES OR UPRIGHT POSITION, RESTORATION OF THE PLANTING SAUCER, AND ALL OTHER CARE NEEDED FOR PROPER GROWTH AND HEALTH OF THE PLANT MATERIAL.

2. INITIAL ACCEPTANCE / MAINTENANCE WARRANTY CONTRACT COMMENCEMENT

A. UPON COMPLETION OF ALL LANDSCAPING, AN INSPECTION FOR SUBSTANTIAL COMPLETION OF THE WORK SHALL BE HELD. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT FOR SCHEDULING OF THE INSPECTION AT LEAST SEVEN (7) DAYS PRIOR TO THE ANTICIPATED INSPECTION DATE. A PUNCH LIST WILL BE COMPLETED, IF APPLICABLE. WHEN THE PUNCH LIST HAS BEEN COMPLETED, A FINAL INSPECTION SHALL BE SCHEDULED. THE CONTRACTOR WILL NOTIFY THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT AT LEAST SEVEN (7) DAYS PRIOR TO THE FINAL ACCEPTANCE INSPECTION DATE.

B. **WARRANTY** CONTRACTOR TO SUBMIT A WRITTEN WARRANTY WILL COMMENCE ON THE DATE OF FINAL ACCEPTANCE THAT ALL PLANTS WILL REMAIN IN A "HEALTHY, VIGOROUS CONDITION" AND MEET SPECIFICATIONS FROM THE DATE OF INITIAL ACCEPTANCE AND UNTIL FINAL ACCEPTANCE (AFTER 365 DAYS). A WRITTEN NOTICE WILL BE GIVEN BY THE LANDSCAPE ARCHITECT TO THE CONTRACTOR STATING THE DATE WHEN THE 365 DAY MAINTENANCE AND GUARANTEE PERIOD BEGIN.

C. IF PLANTS ARE DIRECTED TO BE REPLACED, REPLACEMENT SHALL TAKE PLACE WITHIN 14 DAYS OF RECEIPT OF WRITTEN REPORT.

D. IF THE INSTALLATION CONTRACTOR WILL NOT BE PERFORMING THE MAINTENANCE DURING THE MAINTENANCE PERIOD, THE INSTALLATION CONTRACTOR WILL BE REQUIRED TO PERFORM MONTHLY INSPECTIONS AND DIRECT THE PROPER MAINTENANCE TECHNIQUES AND DIRECT ANY DEAD PLANT MATERIAL BE REPLACED. IF THERE IS A DISCREPANCY AT THE END OF THE MAINTENANCE PERIOD, THE INSTALLATION CONTRACTOR WILL BE RESPONSIBLE FOR ALL PROPER MAINTENANCE AND REPLACEMENT OF DEAD PLANT MATERIAL AT NO COST TO THE OWNER.

3. FINAL INSPECTION AND ACCEPTANCE/ END OF MAINTENANCE CONTRACT

A. WHEN 365 DAY MAINTENANCE WORK IS COMPLETE (PLANT MATERIAL GUARANTEE PERIOD), THE CONTRACTOR SHALL SUBMIT WRITTEN NOTIFICATION TO THE LANDSCAPE ARCHITECT. THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT WILL CONDUCT A FINAL ACCEPTANCE INSPECTION.WITHIN 14 DAYS OF WRITTEN NOTIFICATION.

B. PLANTS SHALL BE ACCEPTABLE IF THEY ARE IN A HEALTHY AND VIGOROUS CONDITION AND ARE IN COMPLIANCE WITH THE SPECIFICATIONS FOR EACH PLANT AS DETERMINED BY THE LANDSCAPE ARCHITECT. REPLACE REJECTED WORK/PLANTS WITHIN 14 DAYS OF NOTIFICATION. CONTINUE LANDSCAPE MAINTENANCE UNTIL WORK IS RE-INSPECTED AND FOUND ACCEPTABLE. PLANT REPLACEMENTS SHALL BE GUARANTEED FOR AN ADDITIONAL 30 DAYS. UPON SATISFACTORY COMPLETION, THE LANDSCAPE ARCHITECT WILL PROVIDE A WRITTEN FINAL ACCEPTANCE OF THE PLANT MATERIAL.

CLIENT:

VISTA GRAND PROPERTIES, LLC

3534 MEDITERRA DRIVE
CLERMONT, FL 34711

PROJECT:

OLD HICKORY TREE ESTATES

LOCATION:

OLD HICKORY TREE RD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

SEAL:



This item as been electronically signed and sealed by Karina A. Veaudry, RLA, Registered Landscape Architect # LA6666803, using a Digital Signature on 06-15-2023. Printed copies to this document are not considered signed and sealed and the signature must be verified on any electronic copies.

REVISIONS	DATE

DESIGNED BY: KAV
DRAWN BY: ECP
CHECKED BY: KAV
DATE: 09-17-2025

PROJECT NUMBER: 20240913OHE

SHEET TITLE:

LANDSCAPE NOTES

SHEET NUMBER:

LP003

Know what's **below.**
Call before you dig.
Dial 811
Or Call 800-282-7411

NORTH BUFFER
15' WIDE
(4 LRG TREE/100 LF)
(2.5 MED/SM TREE/100 LF)
(23 SHRUB/100 LF)
PER P.U.D.

NOTE:

REFER TO SHEET LP001 LANDSCAPE REQUIREMENTS AND PLANT SCHEDULE.

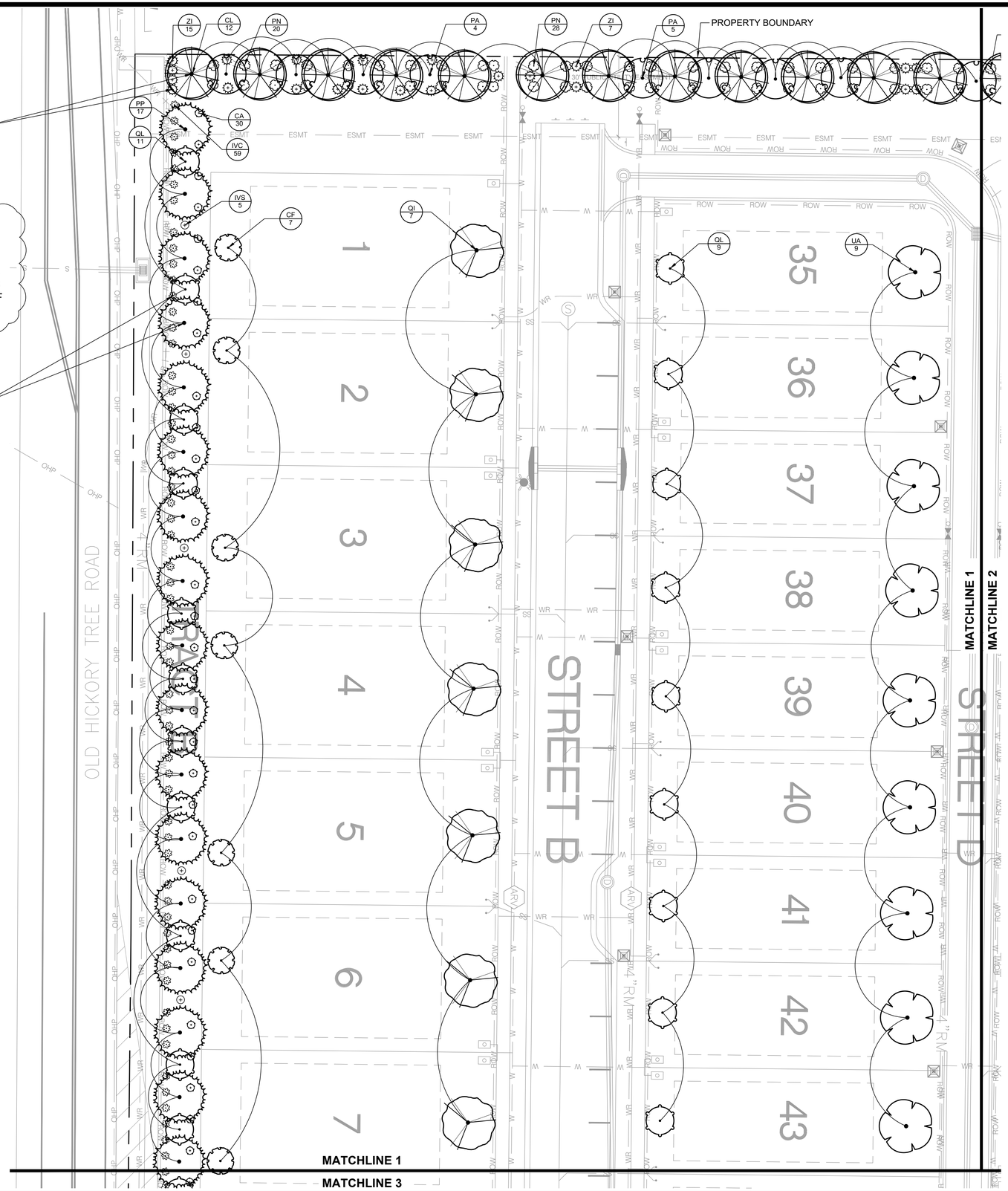
4 **NOTE:**

OLD HICKORY TREE ESTATES HOA WILL BE MAINTAINING ALL TREES IN THE RIGHT-OF-WAYS TO A VERTICAL CLEARANCE OF 13.5 FEET.

WEST BUFFER
15' WIDE
(4 LRG TREE/100 LF)
(2.5 MED/SM TREE/100 LF)
(23 SHRUB/100 LF)
PER P.U.D.

NOTE:

REFER TO SHEET LP001 LANDSCAPE REQUIREMENTS AND PLANT SCHEDULE.



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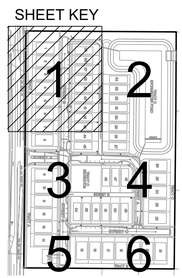


20 0 10 20 40
SCALE: 1" = 20'

NORTH

2

CLIENT:

VISTA GRAND PROPERTIES, LLC

3534 MEDITERRA DRIVE
CLERMONT, FL 34711

PROJECT:

OLD HICKORY TREE ESTATES

LOCATION:

OLD HICKORY TREE RD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

SEAL:



This item as been electronically signed and sealed by Karina A. Veaudry, RLA, Registered Landscape Architect # LA6666803, using a Digital Signature on 06-15-2023. Printed copies to this document are not considered signed and sealed and the signature must be verified on any electronic copies.

REVISIONS	DATE
2 COUNTY COMMENTS	4-22-2025
4 ADDED NOTE	9-17-2025

DESIGNED BY: KAV
DRAWN BY: ECP
CHECKED BY: KAV
DATE: 09-17-2025

PROJECT NUMBER: 20240913OHE

SHEET TITLE:

LANDSCAPE PLAN

SHEET NUMBER:

LP101

Know what's **below.**
Call before you dig.
Dial 811
Or Call 800-282-7411

NORTH BUFFER
15' WIDE
(4 LRG TREE/100 LF)
(2.5 MED/SM TREE/100 LF)
(23 SHRUB/100 LF)
PER P.U.D.

NOTE:

REFER TO SHEET LP001 LANDSCAPE REQUIREMENTS AND PLANT SCHEDULE.

4 **NOTE:**

OLD HICKORY TREE ESTATES HOA WILL BE MAINTAINING ALL TREES IN THE RIGHT-OF-WAYS TO A VERTICAL CLEARANCE OF 13.5 FEET.

PROPERTY BOUNDARY

PN 54 · ZI 16 · PA 7 · CL 13 · CA 12 · RH 5 · ST 2 · PO 3 · RH 23 · CA 45 · PO 11 · ST 6

ESMT

PO 1 · NS 3 · ARF 9

10' WIDE PATH - SEE HARDSCAPE PLANS

1

PO 3 · ARF 15 · NS 5 · ARF 11 · NS 3

ROW

UA 6 · QI 2 · PO 2 · QL 6

BENCH & CONCRETE PAD, SEE SITE FURNISHINGS AND HARDSCAPE PLANS

PO 8 · QI 5

MATCHLINE 1

MATCHLINE 2

STREET D

34 · 33 · 32 · 31 · 30 · 29

TRACT C
STORMWATER POND

MATCHLINE 2

MATCHLINE 4

EAST BUFFER
15' WIDE
(4 LRG TREE/100 LF)
(2.5 MED/SM TREE/100 LF)
(23 SHRUB/100 LF)
PER P.U.D.

NOTE:

REFER TO SHEET LP001 LANDSCAPE REQUIREMENTS AND PLANT SCHEDULE.

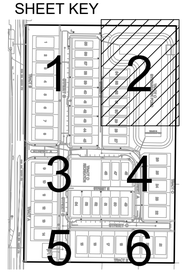
TRACT C:

AMENITIZED OPEN SPACE AREA = 28,781 SF (.66 ACRES)

- WALKING PATH
- BENCHES

SEE CIVIL ENGINEER SHEET 05 GEOMETRY PLAN FROM THEIR PUD FINAL MASTER PLAN SET FOR OPEN SPACE AND RECREATION CALCULATIONS AND ACREAGES

SHEET KEY



20 0 10 20 40
SCALE: 1" = 20'

NORTH

2

CLIENT:

VISTA GRAND PROPERTIES, LLC

3534 MEDITERRA DRIVE
CLERMONT, FL 34711

PROJECT:

OLD HICKORY TREE ESTATES

LOCATION:

OLD HICKORY TREE RD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

SEAL:

REGISTERED LANDSCAPE ARCHITECT KARINA A. VEAUDRY STATE OF FLORIDA

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REVISIONS	DATE
1 COUNTY COMMENTS	3-28-2025
2 COUNTY COMMENTS	4-22-2025
4 ADDED NOTE	9-17-2025

DESIGNED BY: KAV
DRAWN BY: ECP
CHECKED BY: KAV
DATE: 09-17-2025

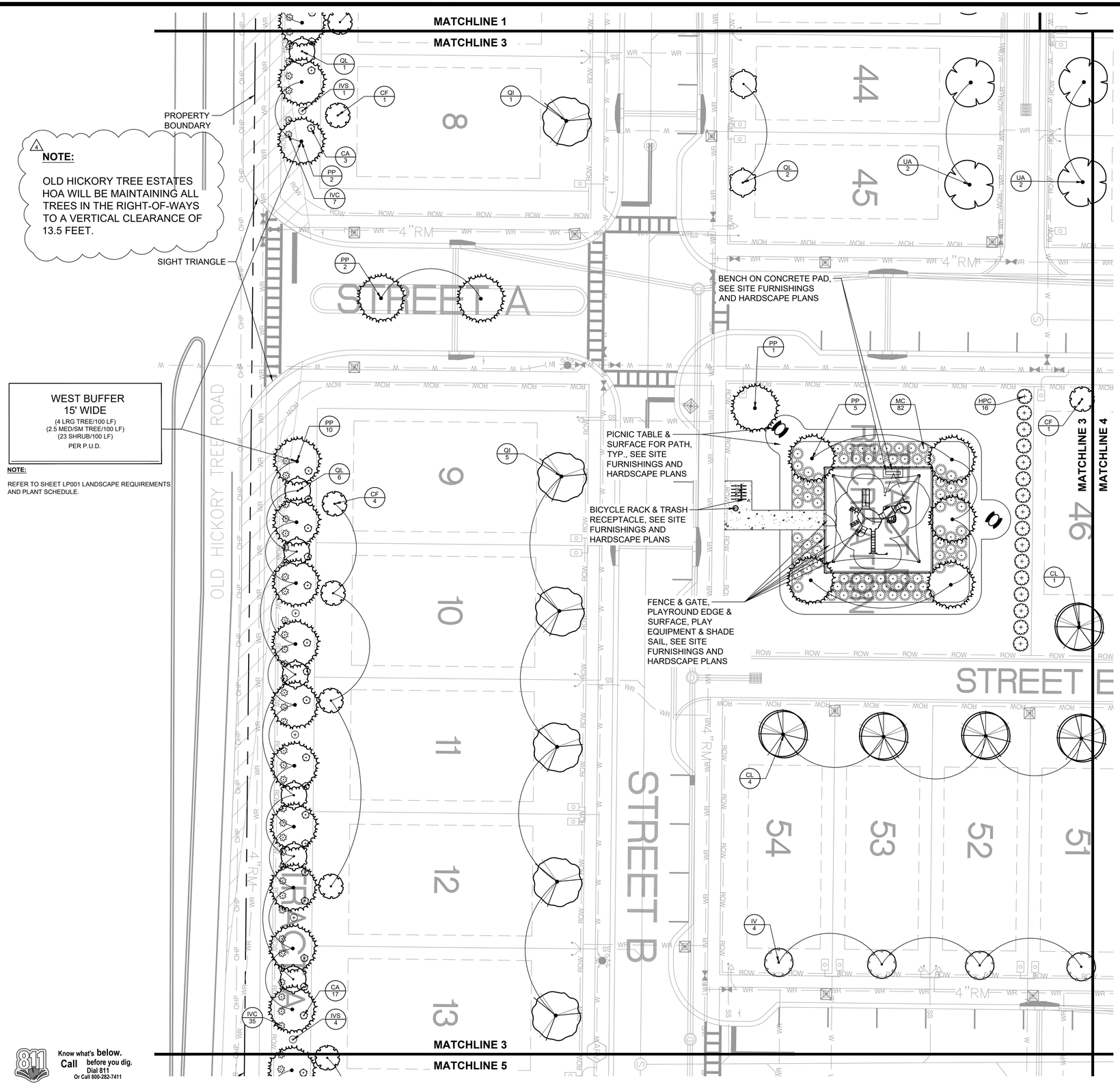
PROJECT NUMBER: 20240913OHE

SHEET TITLE:

LANDSCAPE PLAN

SHEET NUMBER:

LP102



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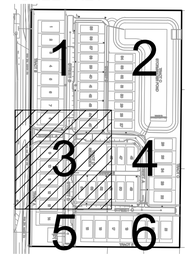

TRACT D:

AMENITIZED OPEN SPACE AREA = 13,750 SF (.32 ACRES)

- PLAYGROUND
- PICNIC AREA
- BICYCLE RACK

SEE CIVIL ENGINEER SHEET 05 GEOMETRY PLAN FROM THEIR PUD FINAL MASTER PLAN SET FOR OPEN SPACE AND RECREATION CALCULATIONS AND ACREAGES

SCALE: 1" = 20'

NORTH

811 Know what's below. Call before you dig. Dial 811 Or Call 800-282-7411

CLIENT:

VISTA GRAND PROPERTIES, LLC

3534 MEDITERRA DRIVE
CLERMONT, FL 34711

PROJECT:

OLD HICKORY TREE ESTATES

LOCATION:

OLD HICKORY TREE RD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

SEAL:



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DESIGNED BY: KAV
DRAWN BY: ECP
CHECKED BY: KAV
DATE: 09-17-2025

PROJECT NUMBER: 20240913OHE

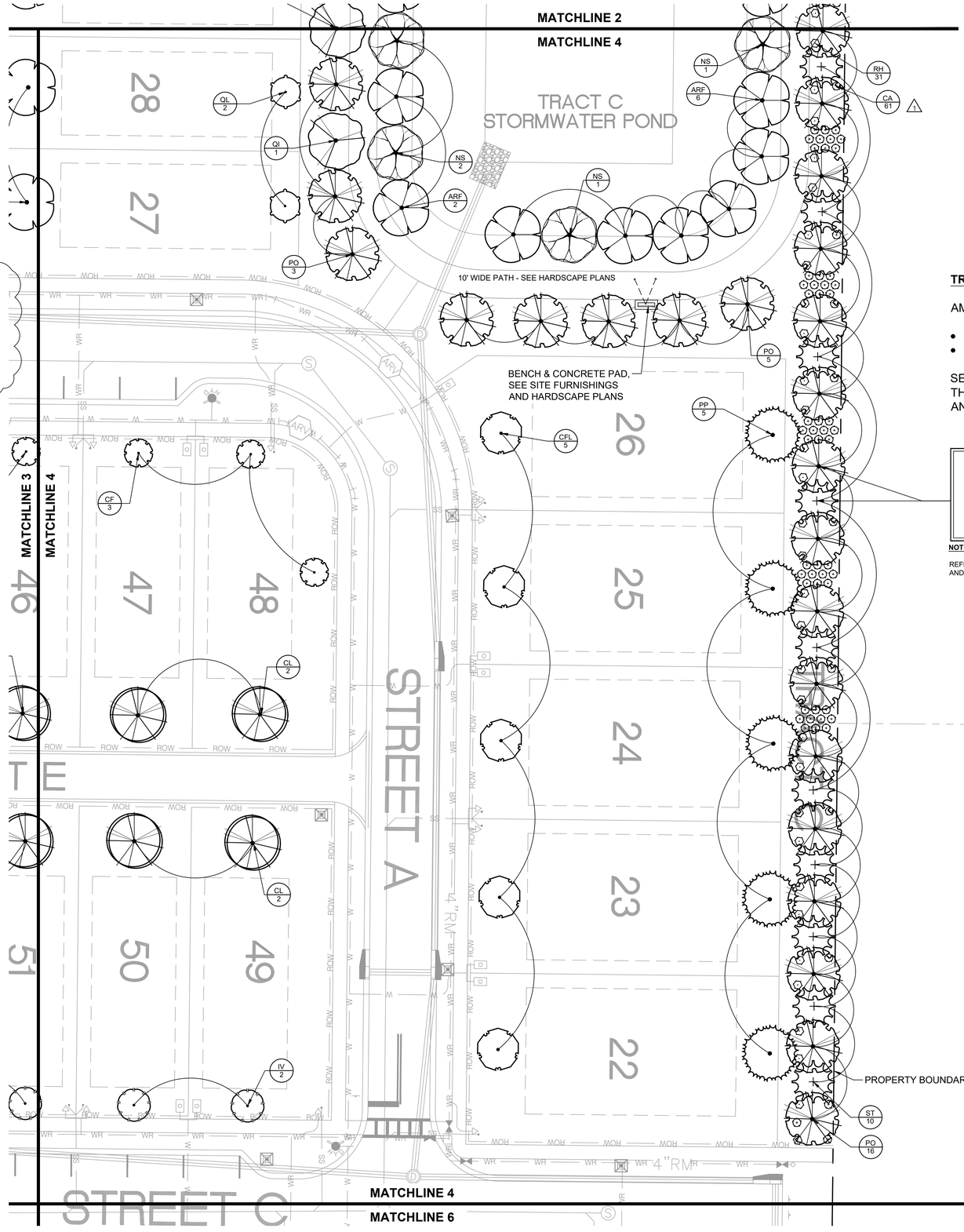
SHEET TITLE:

LANDSCAPE PLAN

SHEET NUMBER:

LP103

Know what's **below.**
Call before you dig.
Dial 811
Or Call 800-282-7411



4 NOTE:

OLD HICKORY TREE ESTATES HOA WILL BE MAINTAINING ALL TREES IN THE RIGHT-OF-WAYS TO A VERTICAL CLEARANCE OF 13.5 FEET.

TRACT C:

AMENITIZED OPEN SPACE AREA = 28,781 SF (.66 ACRES)

- WALKING PATH
- BENCHES

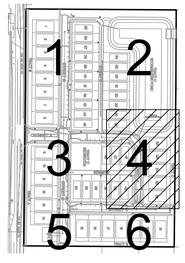
SEE CIVIL ENGINEER SHEET 05 GEOMETRY PLAN FROM THEIR PUD FINAL MASTER PLAN SET FOR OPEN SPACE AND RECREATION CALCULATIONS AND ACREAGES

EAST BUFFER
15' WIDE
(4 LRG TREE/100 LF)
(2.5 MED/SM TREE/100 LF)
(23 SHRUB/100 LF)
PER P.U.D.

NOTE:

REFER TO SHEET LP001 LANDSCAPE REQUIREMENTS AND PLANT SCHEDULE.

SHEET KEY



SCALE: 1" = 20'

NORTH

CLIENT:

VISTA GRAND PROPERTIES, LLC

3534 MEDITERRA DRIVE
CLERMONT, FL 34711

PROJECT:

OLD HICKORY TREE ESTATES

LOCATION:

OLD HICKORY TREE RD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

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CHECKED BY: KAV
DATE: 09-17-2025

PROJECT NUMBER: 20240913OHE

SHEET TITLE:

LANDSCAPE PLAN

SHEET NUMBER:

LP104

Know what's **below.**
Call before you dig.
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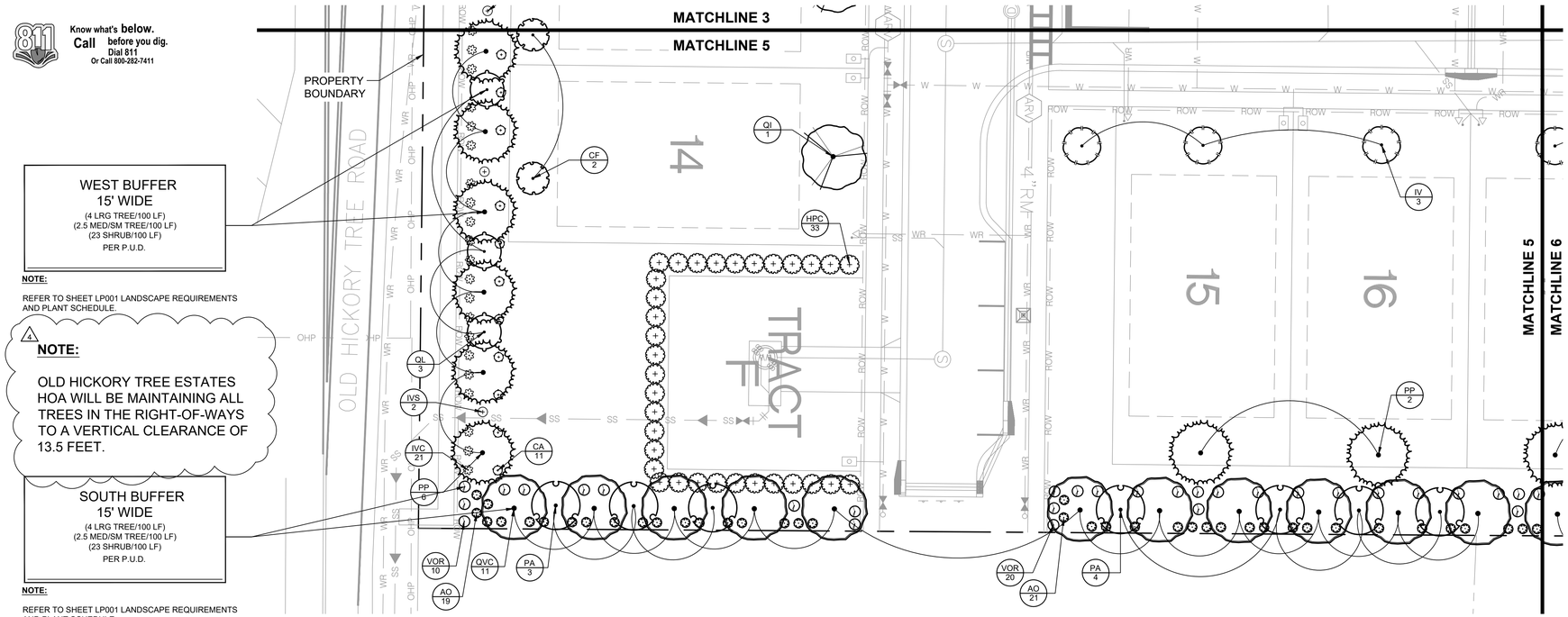
Or Call 800-282-7411



WEST BUFFER
15' WIDE
(4 LRG TREE/100 LF)
(2.5 MED/SM TREE/100 LF)
(23 SHRUB/100 LF)
PER P.U.D.

NOTE:

REFER TO SHEET LP001 LANDSCAPE REQUIREMENTS AND PLANT SCHEDULE.

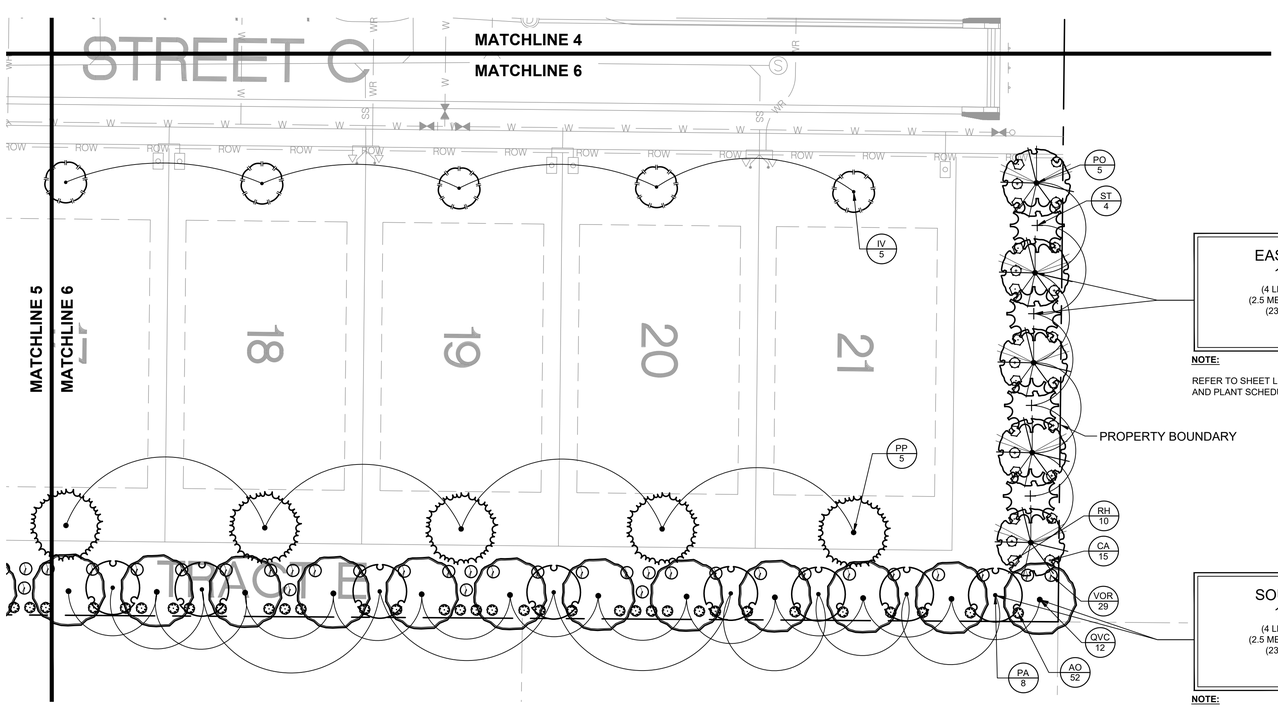
4 **NOTE:**

OLD HICKORY TREE ESTATES HOA WILL BE MAINTAINING ALL TREES IN THE RIGHT-OF-WAYS TO A VERTICAL CLEARANCE OF 13.5 FEET.

SOUTH BUFFER
15' WIDE
(4 LRG TREE/100 LF)
(2.5 MED/SM TREE/100 LF)
(23 SHRUB/100 LF)
PER P.U.D.

NOTE:

REFER TO SHEET LP001 LANDSCAPE REQUIREMENTS AND PLANT SCHEDULE.



EAST BUFFER
15' WIDE
(4 LRG TREE/100 LF)
(2.5 MED/SM TREE/100 LF)
(23 SHRUB/100 LF)
PER P.U.D.

NOTE:

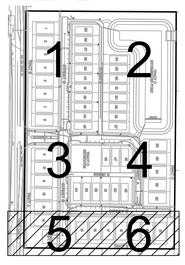
REFER TO SHEET LP001 LANDSCAPE REQUIREMENTS AND PLANT SCHEDULE.

SOUTH BUFFER
15' WIDE
(4 LRG TREE/100 LF)
(2.5 MED/SM TREE/100 LF)
(23 SHRUB/100 LF)
PER P.U.D.

NOTE:

REFER TO SHEET LP001 LANDSCAPE REQUIREMENTS AND PLANT SCHEDULE.

SHEET KEY



20 0 10 20 40
SCALE: 1" = 20'

NORTH

2

CLIENT:

VISTA GRAND PROPERTIES, LLC

3534 MEDITERRA DRIVE
CLERMONT, FL 34711

PROJECT:

OLD HICKORY TREE ESTATES

LOCATION:

OLD HICKORY TREE RD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

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DATE: 09-17-2025

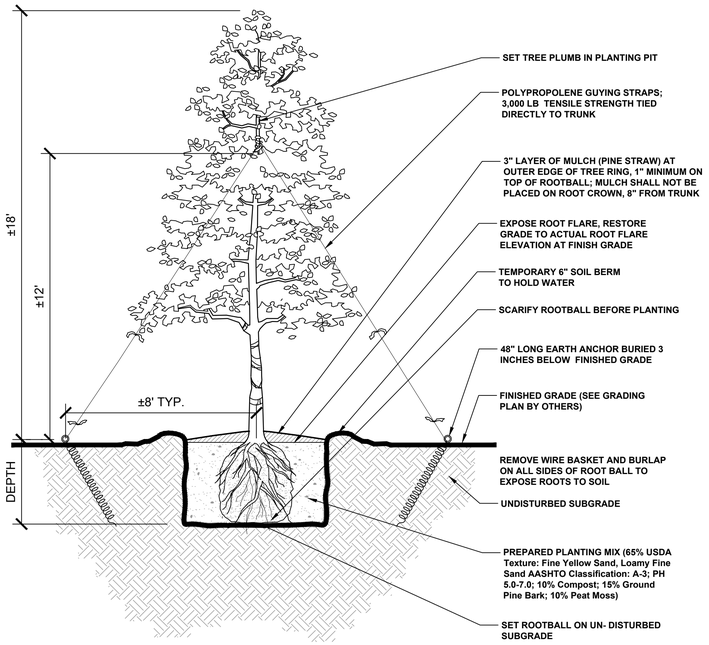
PROJECT NUMBER: 20240913OHE

SHEET TITLE:

LANDSCAPE PLAN

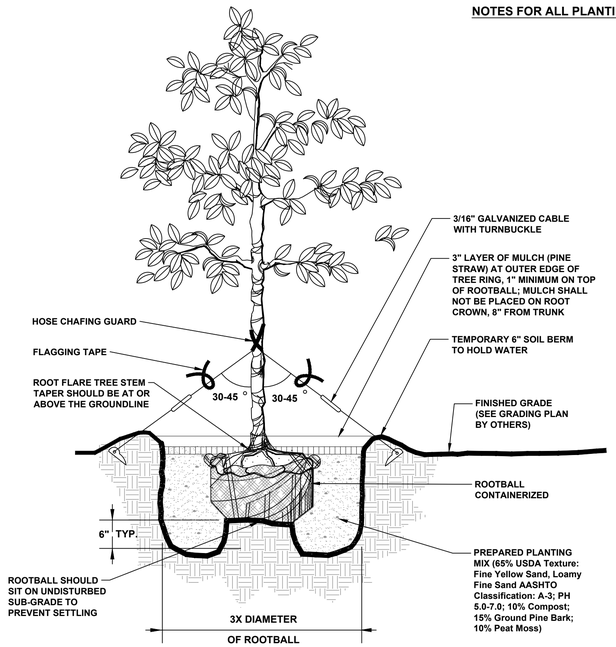
SHEET NUMBER:

LP105



LARGE TREE PLANTING & GUYING DETAIL

N.T.S.

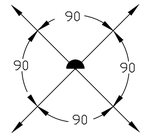


SMALL TREE PLANTING & GUYING DETAIL

N.T.S.

NOTES FOR ALL PLANTINGS:

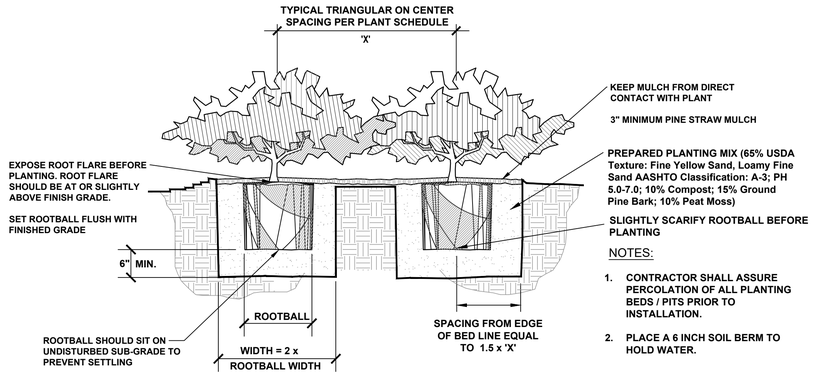
1. DO NOT MOUND OR INSTALL MULCH AGAINST THE TRUNK OR STEM OF TREES AND SHRUBS OR THE CROWN OF PERENNIALS AND GROUNDCOVERS. THERE SHOULD BE FREE AND OPEN AIR CIRCULATION AROUND THE TRUNK OF THE PLANT AND THE GROUND IN THE IMMEDIATE AREA AT THE BASE OF THE TRUNK.
2. CONTRACTOR TO REMOVE ALL WIRE BASKETS AND BURLAP FROM B&B PLANTS LEAVING ONLY THE FABRIC AND WIRE ON THE VERY BOTTOM OF BALL IF IMPOSSIBLE TO REMOVE.



STAKING DIAGRAM
PLAN VIEW

NOTES:

1. ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION. SEE LANDSCAPE NOTES ON SEPARATE SHEET.
2. WATERING REQUIREMENTS ARE DIFFERENT FOR EACH TREE SPECIES AND SOIL CONDITION. CONSULT AN ARBORIST AS TO THE APPROPRIATE WATER REGIMEN.
3. DISCARD SUBGRADE REMOVED FROM PLANTING PIT AND REPLACE WITH PREPARED SOIL MIX, PER SPECIFICATIONS. PLACE NEW SOIL MIX AROUND ROOTBALL IN SIX-INCH LAYERS, FIRMLY TAMPING AND WATERING EACH LAYER UNTIL THE PLANTING PIT IS FILLED TO FINISHED GRADE LEVEL.
4. TREES UNDER 3 INCH CALIPER DO NOT REQUIRE TO BE GUYED; HOWEVER CONTRACTOR IS RESPONSIBLE TO ENSURE TREES DO NOT BLOW OVER DURING MAINTENANCE PERIOD.

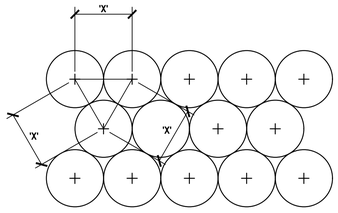


GROUNDCOVER & SHRUB PLANTING DETAIL

N.T.S.

NOTES:

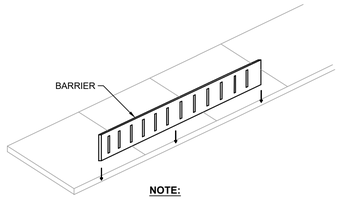
1. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING BEDS / PITS PRIOR TO INSTALLATION.
2. PLACE A 6 INCH SOIL BERM TO HOLD WATER.



ALL SHRUBS & GROUNDCOVER MASSES TO USE TRIANGULAR SPACING EXCEPT WHERE NOTED. REFER TO PLANT SCHEDULE FOR INDIVIDUAL PLANT SPACING 'X'

TYPICAL PLANT SPACING DETAIL

N.T.S.



ROOT BARRIER - MODEL NO: UB 12-2. INSTALLATION TO MEET MANUFACTURER AND ASTM STANDARDS.

QUANTITY: T.B.D.

DEPTH: 12"

MANUFACTURER: DEEPROOT GREEN INFRASTRUCTURE, LLC
CONTACT: INFO@DEEPROOT.COM
PHONE: (415) 781-9700
WEBSITE:
WWW.DEEPROOT.COM

OR, APPROVED EQUAL

NOTE:

PROVIDE 12" BARRIER AND INSTALL DIRECTLY BEHIND PROPOSED SIDEWALK. INSTALL BEFORE INSTALLING NEW TREES.

ROOT BARRIER - AXONOMETRIC VIEW

N.T.S.

CLIENT:

VISTA GRAND PROPERTIES, LLC

3534 MEDITERRA DRIVE
CLERMONT, FL 34711

PROJECT:

OLD HICKORY TREE ESTATES

LOCATION:

OLD HICKORY TREE RD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

SEAL:



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REVISIONS	DATE

DESIGNED BY: KAV
DRAWN BY: ECP
CHECKED BY: KAV
DATE: 09-17-2025

PROJECT NUMBER: 20240913OHE

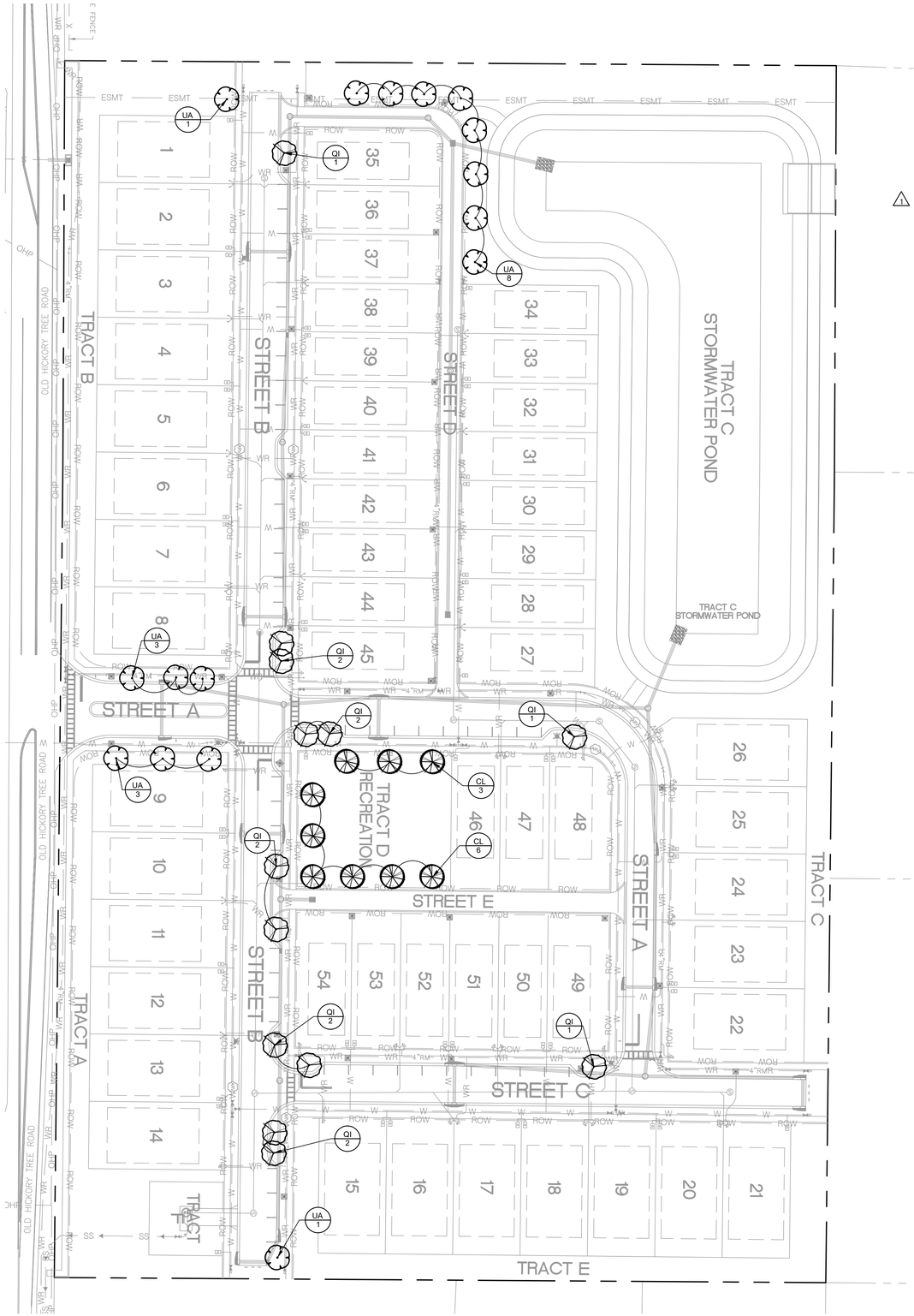
SHEET TITLE:

LANDSCAPE INSTALLATION DETAILS

SHEET NUMBER:

LP201

Know what's **below.**
Call before you dig.
Dial 811
Or Call 800-282-7411



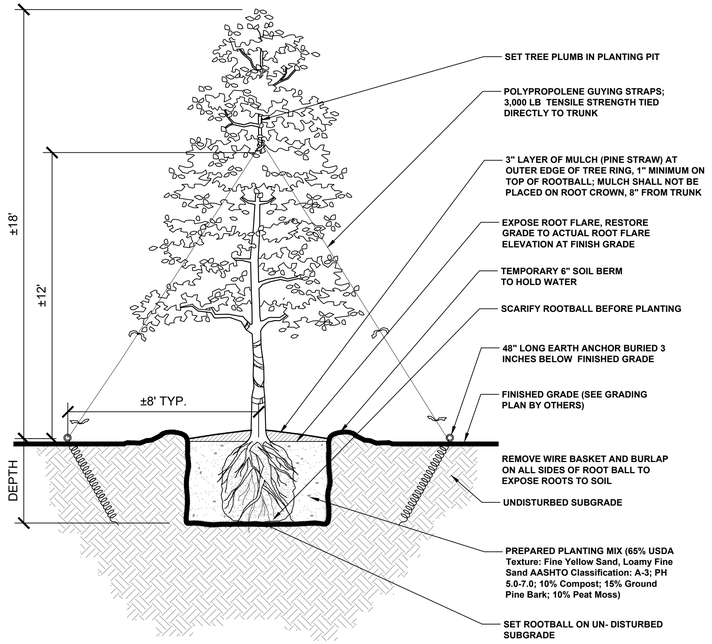
PLANT SCHEDULE					
SYMBOL	CODE	QTY	COMMON / BOTANICAL NAME	SIZE	SPECIFICATION
TREES					
	CL	9	SUGAR HACKBERRY CELTIS LAEVIGATA	65 GAL. / 3" CAL.	10-11' HT. X 4-5' SP.
	QI	13	BLUEJACK OAK QUERCUS INCANA	65 GAL. / 3" CAL.	10-11' HT. X 3-4' SP.
	UA	16	WINGED ELM ULMUS ALATA	65 GAL. / 3" CAL.	11-12' HT. X 4-5 SP.

LANDSCAPE CALC. & REQ. FOR ST. CLOUD

STREET TREES
INTERNAL ROADWAY PLANTING (PER SEC. 4.8.5.)
2,830 x 2 = 5,660 LF 1 LARGE TREE MAX EVERY 40 LF (55 LF WITH CURB CUTS, FIRE HYDRANTS AND OTHER INFRASTRUCTURE ELEMENTS) △2 = 103 LARGE TREES REQUIRED = 38 LARGE TREES PROVIDED*
* DUE TO UNDERGROUND WATER PIPE, UTILITY SERVICE LINES, STORM PIPE, & REUSE PIPE WITHIN THE AREA BETWEEN BACK OF CURB AND SIDEWALK WHERE INTERNAL STREET TREES WOULD BE PLANTED, AND A % OF THE STREETS VOID OF AREA BETWEEN BACK OF CURB AND SIDEWALK.

NOTES:

1. TREES TO BE INSTALLED AFTER LOTS ARE BUILT.
2. TREES TO BE INSTALLED CLEAR OF UTILITIES.
3. MULCH BELOW ALL TREES. TREES WITHIN SOD WILL HAVE 6 FT. DIAMETER MULCH RING.
4. IN AREAS WITHOUT PROPOSED PLANTS, INSTALL BAHIA SOD, PASPALUM NOTATUM 'ARGENTINE'. CONTRACTOR TO VERIFY SOD QUANTITIES.
5. CONTRACTOR TO COORDINATE WITH LANDSCAPE ARCHITECT (321) 338-4781. ALL PLANTS MUST BE LAID OUT IN FIELD AND APPROVED PRIOR TO PLANTING.
6. IF THERE IS A DISCREPANCY BETWEEN PLANTS ON THE PLAN(S) AND PLANTS IN THE PLANT SCHEDULE, THE PLANT SCHEDULE WILL PREVAIL.
7. SELECTIVE PRUNING ONLY FOR PLANT WITH DEAD, DISEASED, OR CROSSING BRANCHES. NEVER SHEAR OR TOP ANY TREE.



LARGE TREE PLANTING & GUYING DETAIL

N.T.S.

50 0 25 50 100
SCALE: 1" = 50'

NORTH

CLIENT:

VISTA GRAND PROPERTIES, LLC

3534 MEDITERRA DRIVE
CLERMONT, FL 34711

PROJECT:

OLD HICKORY TREE ESTATES

LOCATION:

OLD HICKORY TREE RD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
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DESIGNED BY: KAV
DRAWN BY: ECP
CHECKED BY: KAV
DATE: 09-17-2025

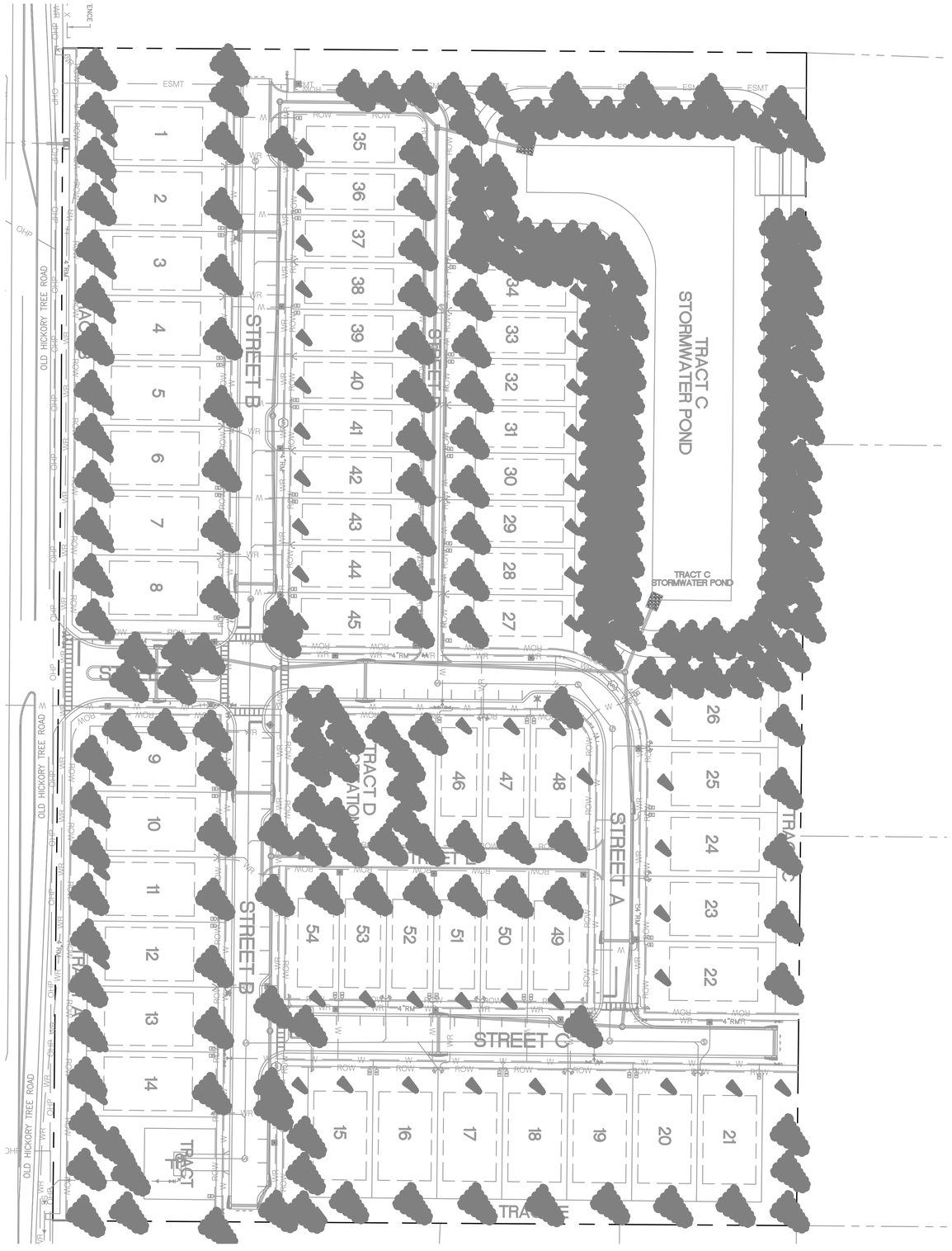
PROJECT NUMBER: 20240913OHE

SHEET TITLE:

INTERNAL STREET TREE PLAN

SHEET NUMBER:

LS101



LC5:

TOTAL SITE AREA = 627,264 S.F.

TOTAL TREE CANOPY SHADE PROVIDED = 169,825 S.F.

169,825 S.F. / 627,264 S.F. = 27% TREE CANOPY COVERAGE FOR THE TOTAL SITE

TOTAL SITE LANDSCAPE AREA = 174,196 S.F.

174,196 S.F. x 30% = 52,258 S.F. TREE CANOPY SHADE COVERAGE REQUIRED

169,825 S.F. PROVIDED > 52,258 S.F. REQUIRED

NOTE: SHADE COVERAGE BASED ON TREES AT 18 YEARS MATURITY.

IRC1:

IRRIGATED AREA = 13,997 S.F.

100% LOW VOLUME IRRIGATION DESIGN

811 Know what's **below.** Call before you dig. Dial 811 Or Call 800-282-7411

50 0 25 50 100

SCALE: 1" = 50'

NORTH

CLIENT:

VISTA GRAND PROPERTIES, LLC

3534 MEDITERRA DRIVE
CLERMONT, FL 34711

PROJECT:

OLD HICKORY TREE ESTATES

LOCATION:

OLD HICKORY TREE RD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

SEAL:

REVISIONS	DATE

DESIGNED BY: KAV
DRAWN BY: ECP
CHECKED BY: KAV
DATE: 05-13-2025

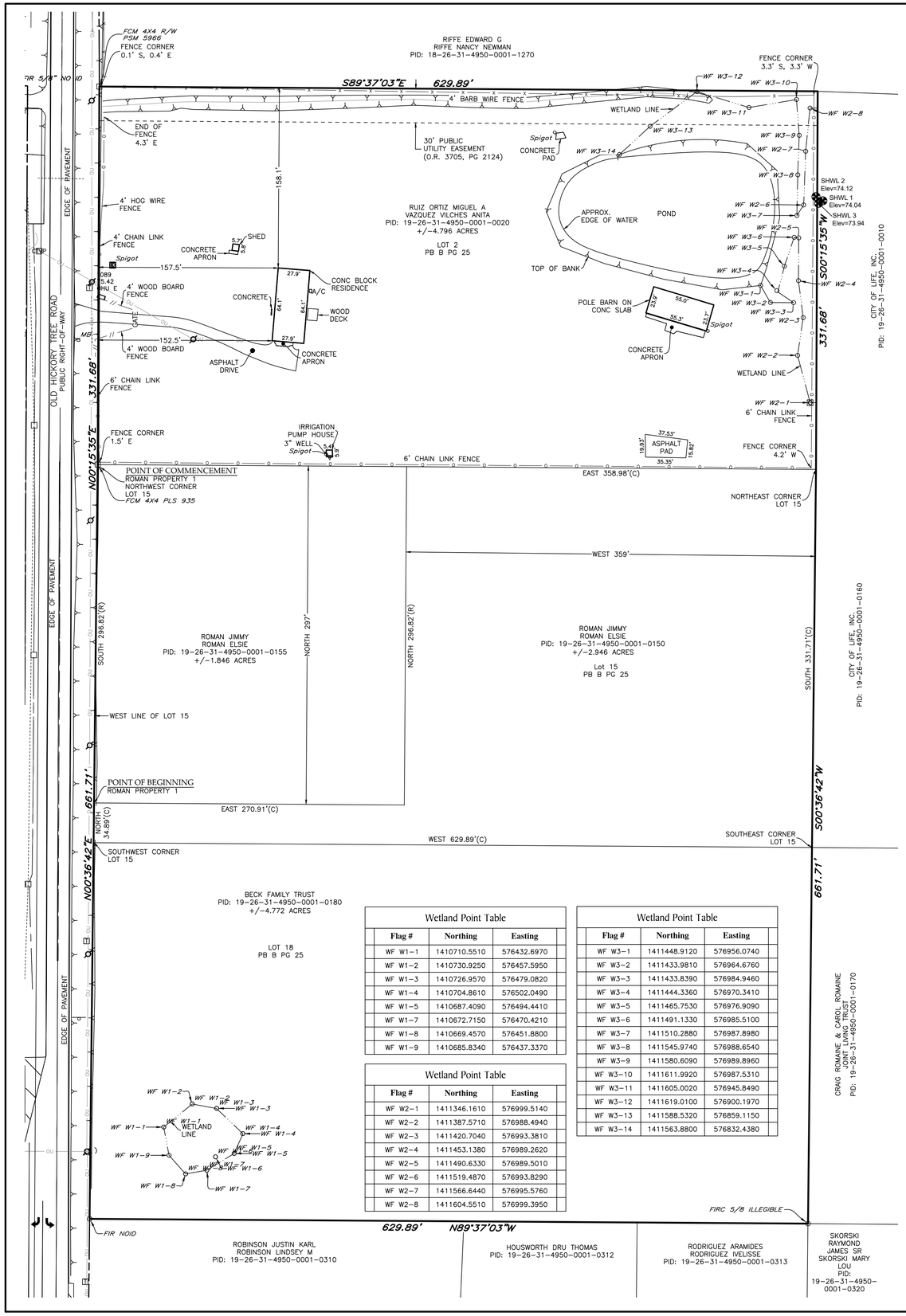
PROJECT NUMBER: 20240913OHE

SHEET TITLE:

TEP Exhibit
LC5 & IRC1

SHEET NUMBER:

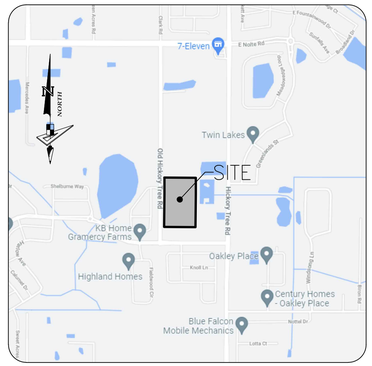
LC5 & IRC1



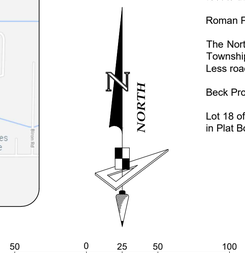
Wetland Point Table		
Flag #	Northing	Easting
WF W1-1	1410710.5510	576432.6970
WF W1-2	1410730.9250	576457.5950
WF W1-3	1410726.9570	576479.0820
WF W1-4	1410704.8610	576502.0490
WF W1-5	1410687.4090	576494.4410
WF W1-7	1410672.7150	576470.4210
WF W1-8	1410669.4570	576451.8800
WF W1-9	1410685.8340	576437.3370

Wetland Point Table		
Flag #	Northing	Easting
WF W2-1	1411346.1610	576999.5140
WF W2-2	1411387.5710	576988.4940
WF W2-3	1411420.7040	576993.3810
WF W2-4	1411453.1380	576989.2620
WF W2-5	1411490.6330	576989.5010
WF W2-6	1411519.4870	576993.8290
WF W2-7	1411566.6440	576995.5760
WF W2-8	1411604.5510	576999.3950

Wetland Point Table		
Flag #	Northing	Easting
WF W3-1	1411448.9120	576956.0740
WF W3-2	1411433.9810	576964.6760
WF W3-3	1411433.8390	576984.9460
WF W3-4	1411444.3360	576970.3410
WF W3-5	1411465.7530	576976.9090
WF W3-6	1411491.1330	576985.5100
WF W3-7	1411510.2880	576987.8980
WF W3-8	1411545.9740	576988.6540
WF W3-9	1411580.6090	576989.8960
WF W3-10	1411611.9920	576987.5310
WF W3-11	1411605.0020	576945.8490
WF W3-12	1411619.0100	576900.1970
WF W3-13	1411588.5320	576859.1150
WF W3-14	1411563.8800	576832.4380



VICINITY MAP
NOT TO SCALE





SCALE: 1" = 50'

FA21-201 SCHEDULE B-II EXCEPTIONS

Items 1 - 8 intentionally omitted. (NOT A SURVEY MATTER)

9. Restrictions, dedications, conditions, reservations, easements and other matters shown on the plat of THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION OF SECTION 19, as recorded in Plat Book B, Page(s) 25, but deleting any covenant, condition or restriction indicating a preference, limitation or discrimination based on race, color, religion, sex, handicap, familial status or national origin to the extent such covenants, conditions or restrictions violate 42 USC 3604(c). (AFFECTS. AS SHOWN)

10. Ordinance No. 2015-23 as recorded in Book 4863, Page 957. (AFFECTS, NOTHING TO PLOT)

11. Resolution recorded in Book 3079, Page 322. (AFFECTS, AS SHOWN)

12. Easement recorded in Book 3705, Page 2124. (AFFECTS, AS SHOWN))

FA21-066 SCHEDULE B-II EXCEPTIONS

Items 1 - 8 intentionally omitted. (NOT A SURVEY MATTER)

9. Restrictions, dedications, conditions, reservations, easements and other matters shown on the plat of THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED), a recorded in Plat Book B, Page(s) 25, but deleting any covenant, condition or restriction indicating a preference, limitation or discrimination based on race, color, religion, sex, handicap, familial status or national origin to the extent such covenants, conditions or restrictions violate 42 USC 4604(c). (AFFECTS, AS SHOWN)

10. Ordinance No. 2015-23 as recorded in Book 4863, Page 957. (AFFECTS, NOTHING TO PLOT)

FA21-067 SCHEDULE B-II EXCEPTIONS

Items 1 - 8 intentionally omitted. (NOT A SURVEY MATTER)

9. Restrictions, dedications, conditions, reservations, easements and other matters shown on the plat of THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED), a recorded in Plat Book B, Page(s) 25, but deleting any covenant, condition or restriction indicating a preference, limitation or discrimination based on race, color, religion, sex, handicap, familial status or national origin to the extent such covenants, conditions or restrictions violate 42 USC 4604(c). (AFFECTS, AS SHOWN)

10. Ordinance No. 2015-23 as recorded in Book 4863, Page 957. (AFFECTS, NOTHING TO PLOT)

FA21-070 SCHEDULE B-II EXCEPTIONS

Items 1 - 8 intentionally omitted. (NOT A SURVEY MATTER)

9. Restrictions, dedications, conditions, reservations, easements and other matters shown on the plat of THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED), a recorded in Plat Book B, Page(s) 25, but deleting any covenant, condition or restriction indicating a preference, limitation or discrimination based on race, color, religion, sex, handicap, familial status or national origin to the extent such covenants, conditions or restrictions violate 42 USC 4604(c). (AFFECTS, AS SHOWN)

10. Ordinance No. 2015-23 as recorded in Book 4863, Page 957. (AFFECTS, NOTHING TO PLOT)

Item 11 intentionally omitted. (NOT A SURVEY MATTER)

OVERALL DESCRIPTION: AS SURVEYED

DESCRIPTION: A parcel of land being Lots 2, 15, and 18 of The Seminole Land and Investment Company's (Incorporated) Subdivision, Plat Book B, Page 25, and lying in Section 19, Township 26 South, Range 31 East, Osceola County, Florida, and being more particularly described as follows:

BEGINNING at a point being the Northwest corner of said Lot 15, said point being in the East right of way line of Old Hickory Tree Road; run thence along said East right of way line, N.00°15'35"E., a distance of 331.68 feet to the Northwest corner of aforesaid Lot 2; thence leaving said East right of way line along the North boundary of said Lot 2, S.89°37'03"E., a distance of 629.89 feet to the Northeast corner of said Lot 2; run thence along the East boundary of said Lot 2, S.00°15'35"W., a distance of 331.68 feet to the Southeast corner of said Lot 2; run thence along the East boundary of aforesaid Lots 15 and 18, S.00°36'42"W., a distance of 661.71 feet to the Southeast corner of said Lot 18; thence along the South boundary of said Lot 18, N.89°37'03"W., a distance of 629.89 feet to a point being the Southwest corner of said Lot 18, said point being in the aforesaid East right of way line of Old Hickory Tree Rd.; thence along said East right of way line of Old Hickory Tree Rd., N.00°36'42"E., a distance of 661.71 feet to the **POINT OF BEGINNING.**

Containing 14.365 Acres more or less.

LEGAL DESCRIPTION:

Ruiz Property

Lot 2 of THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION of Section 19, Township 26 South, Range 31 East, according to the Plat thereof as recorded in Plat Book B, Page 25, of the Public Records of OSCEOLA County, Florida.

Roman Property 1

From the Northwest corner of Lot 15, according to the Seminole Land and Investment Company's Survey of Section 19, Township 26 South, Range 31 East, Osceola County, Florida, run South, along the West line of said Lot 15, 296.82 feet to the Point of Beginning; thence run East, parallel to the North line of said Lot 15, 258.98 feet; run thence North, parallel to aforesaid West line, 296.82 feet; run thence East 283.25 feet to the Northeast corner of said Lot 15; run thence South, 331.82 feet, to the Southeast corner of said Lot 15; run thence West, 641.82 feet to the Southwest corner of said Lot 15; run thence North, 35.0 feet to the Point of Beginning.

Roman Property 2

The North 296.82 feet of the West 358.98 feet of Lot 15, SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) Subdivision of Section 19, Township 26 South, Range 31 East, according to the Official Plat thereof as recorded in Plat Book B, Page 25, Public Records of Osceola County, Florida. Less road right-of-way.

Beck Property

Lot 18 of THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION of Section 19, Township 26 S, Range 31 E, as per Plat in Plat Book B, Page 25, of the Public Records of Osceola County, Florida.

SURVEYOR'S NOTES:

1. Easements, rights-of-ways, set back lines, reservations, agreements and other similar matters taken from First American Title Insurance Company, American Land Title Association Commitment, Order Number: FA21-201 with a Commitment date of July 01, 2021, FA21-066 with a Commitment date of July 19, 2021, FA21-067 with a Commitment date of June 23, 2021 and FA21-070 with a Commitment date of June 23, 2021.
2. This survey is limited to above ground visible improvements along and near the boundary lines, except as shown hereon, and that nothing below the ground was located including, but not limited to foundations (footings), utilities, etc.
3. Bearings shown hereon are based on the Northerly line of Lot 1 having a Grid bearing of S 62°11'04" E. The Grid Bearings as shown hereon refer to the State Plane Coordinate System, North American Horizontal Datum of 1983 (NAD 83-2011 Adjustment) for the East Zone of Florida.
4. This survey is intended to be displayed at 1" = 50'.
5. Elevations shown hereon are based on the North American Vertical Datum of 1988 (NAVD 88) based on National Geodetic Survey Benchmark "E 576", having a published elevation of 74.74 feet (NAVD 88).
6. All dimensions, unless otherwise noted, are survey dimensions.
7. Additions or Deletions to survey maps or reports by other than the signing party or parties is prohibited without the written consent of the signing party or parties.
8. The subject parcel lies in Flood Zone "X", according to Flood Insurance Rate Map, Map No. 12097C0280G for Osceola County, dated June 18, 2013, Osceola County Community No. 120189, City of St. Cloud Community No. 120191 and issued by the Federal Emergency Management Agency. Lines shown, if any, have been digitally translated from DFIRM database information supplied by the FEMA Map Service Center (https://msc.fema.gov).
9. Use of this survey for purposes other than intended, without written verification, will be at the user's sole risk and without liability to the surveyor. Nothing hereon shall be construed to give any rights or benefits to anyone other than those certified to.
10. On this drawing, certify means to state or declare a professional opinion of conditions regarding those findings or facts which are the subject of the certification and does not constitute a warranty or guarantee, either implied or expressed. This certification is only for the lands as described. This certification is not a certificate of title, easements, zoning, or freedom of encumbrances.
11. This survey meets the maximum allowable Relative Positional Precision for an ALTA/NSPS Land Title Survey (0.07 feet plus 50 parts per million).
12. Subject Parcel has no evidence of construction currently going on or earth moving activities on site.
13. The Surveyor is not aware of any plans to change the existing Right-of-way lines.
14. There are 0 Parking Spaces and 0 Handicap Parking Spaces in the area this survey covers.
15. Wetland lines shown hereon were staked by others and field located by Geopoint Surveying, Inc.
16. Land combined contain 14.365 acres, more or less.
17. This survey represents site conditions present at the time of the last field date stated below. No subsequent site visit has been performed and no warranty is extended or given regarding site changes, if any, post said field date.

LEGEND

O.R.	Official Records Book
PB	Plat Book
PG	Page(s)
LB	Licensed Business
FIR	Found Iron Rod
FIRC	Found Iron Rod & Cap
FCM	Found Concrete Monument
MES	Mitered End Section
RCP	Reinforced Concrete Pipe
CPP	Corrugated Plastic Pipe
PVC	Polyvinyl Chloride Pipe
GTI	Grate Top Inlet
R/W	Right-of-way
PID	Property Identification Number
WF	Wetland Flag
	Sign
T	Telephone Pedestal
E	Electric Pedestal
C/P	Cable Pedestal
	Buried Cable Warning Marker
	Power Pole
	Guy Anchor
OU	Overhead Utility Line
CO	Coconut Palm
LA	Laurel Oak
LI	Live Oak
P	Pine

SURVEYOR'S CERTIFICATION:

To: Elite Trust and Escrow Company, LLC, a Florida limited liability company, as Trustee of OHTE Trust #1, a Florida Land Trust, dated 7/7/2021, al all beneficiaries as their interests may appear, First American Title Insurance Company, Walker and Tudhope, P.A., TEK Contracting, Inc., Miguel A Ruiz Ortiz, Anita Vazquez Vilches, Jimmy Roman, Elsie Roman and Beck Family Trust:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 5, 7, 8, 9, 13, 16, 17 and 18 of Table A thereof.
The field work was completed on 08/05/2022.

GEOPOINT SURVEYING, INC.

David W. Maxwell
Florida Professional Surveyor and Mapper #7311

SHEET 01 : ALTA SURVEY
SHEET 02: TOPOGRAPHIC & TREE SURVEY

PROJECT:	ALTA SURVEY
PHASE:	OLD HICKORY TREE ESTATES
DRAWN: MRC	DATE: 10/23/21 CHECKED BY: JDF
P.CHIEF: EB	FIELD BOOK: 2021-EB
DATA FILE:	OLD HICKORY TREE(EB)

REVISIONS

DATE	DESCRIPTION	DRAWN BY
11/16/21	TOPOGRAPHIC & TREE INFO	MRC
08/31/22	ADDITIONAL TOPOGRAPHIC & TREE INFO	TJS
11/26/24	UPDATED WETLAND FLAGS ADD SHWL	BLB

SEE ALTA/NSPS SURVEYOR'S CERTIFICATION

DATE OF LAST FIELD SURVEY: **August 05, 2022**

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER

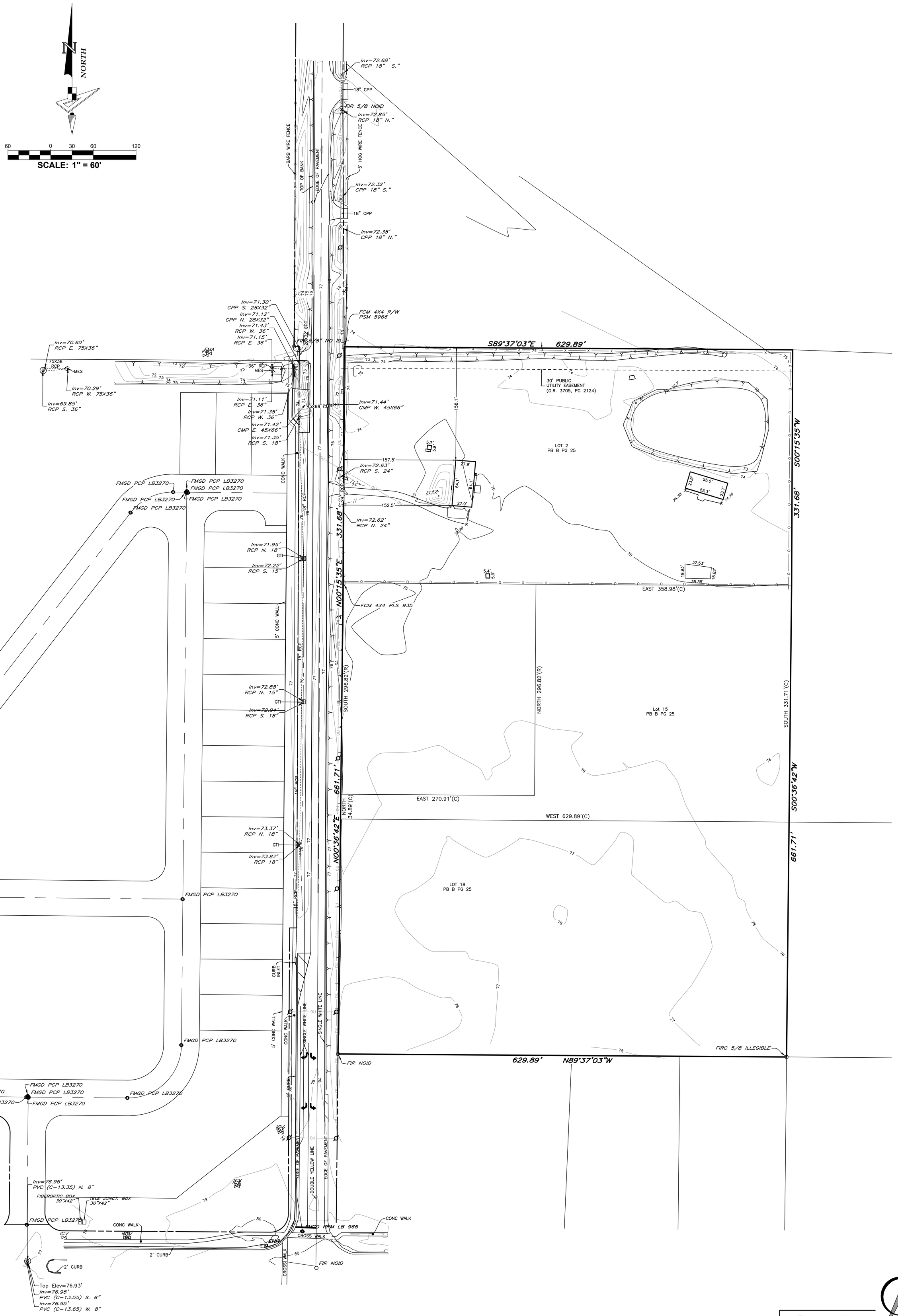
ALTA/NSPS LAND TITLE, TOPOGRAPHIC AND TREE SURVEY

PREPARED FOR
TEK Contracting, Inc.
LOCATED IN
Section 19, Township 26 S., Range 31 E.
Osceola County, Florida

GeoPoint Surveying, Inc.
555 Winderly Pl. Ste. 120
Maitland, Florida 32751
www.geopointsurvey.com
Phone: (321) 270-0440
Fax: (813) 248-2266
Licensed Business No.: LB 7768

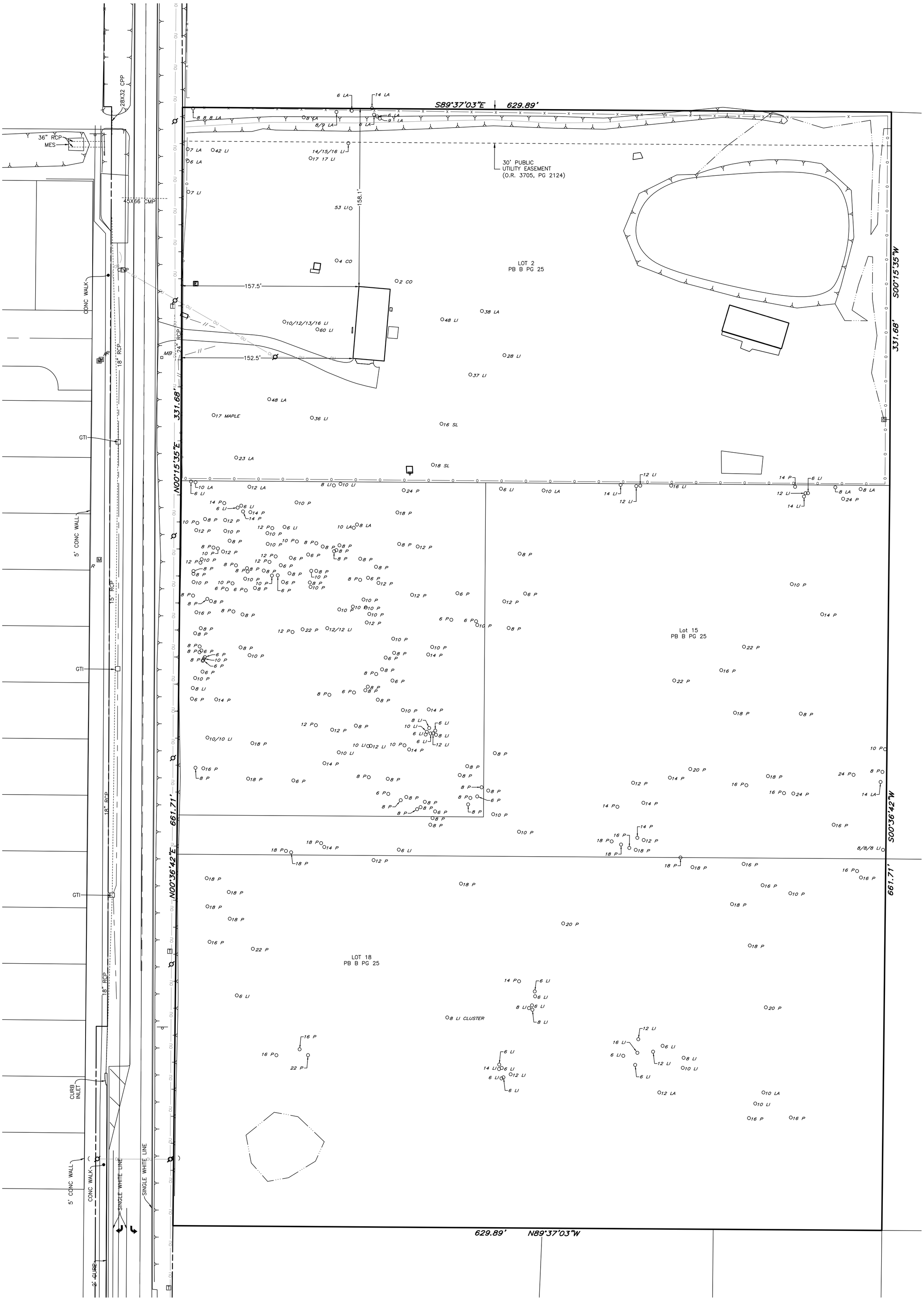
SHEET NUMBER: **01** of **03**

FILE PATH: O:\OLD HICKORY TREE ESTATES\SURVEY\OLDHICKORYTREEESTATES_ALTA-TOPO.DWG PLOTTED BY: DAVID MAXWELL ON: 9/11/2025 1:59 PM LAST SAVED BY: DMAXWELL ON: 9/11/2025 1:58 PM



GeoPoint Surveying, Inc.
555 Winderly Pl. Ste. 120
Maitland, Florida 32751
www.geopointsurvey.com
Phone: (321) 270-0440
Fax: (813) 248-2266
Licensed Business No.: LB 7768

SHEET NUMBER: **02** of **03**



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Maitland, Florida 32751
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Phone: (321) 270-0440
Fax: (813) 248-2266
Licensed Business No.: LB 7768

SHEET NUMBER: **03** of **03**

TRAFFIC IMPACT ANALYSIS

OLD HICKORY TREE ESTATES
CITY OF ST. CLOUD, FLORIDA

Prepared for:
Stonebridge Development, LLC
4327 South Highway 27, Suite 607
Clermont, Florida 34711

Prepared by:

Traffic Planning and Design, Inc.
535 Versailles Drive
Maitland, Florida 32751
407-628-9955

September 2024

TPD № 5981

PROFESSIONAL ENGINEERING CERTIFICATION

I hereby certify that I am a Professional Engineer properly registered in the State of Florida practicing with Traffic Planning & Design, Inc., a corporation authorized to operate as an engineering business, EB-3702, by the State of Florida Department of Professional Regulation, Board of Professional Engineers, and that I have prepared or approved the evaluations, findings, opinions, conclusions, or technical advice attached hereto for:

PROJECT: Old Hickory Tree Estates

LOCATION: City of St. Cloud, Florida

CLIENT: Stonebridge Development, LLC

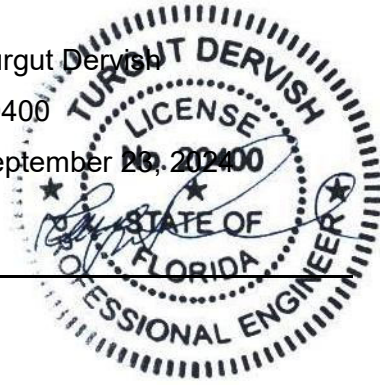
I hereby acknowledge that the procedures and references used to develop the results contained in these computations are standard to the professional practice of Transportation Engineering as applied through professional judgment and experience.

NAME: Turgut Dervish

P.E. No.: 20400

DATE: September 26, 2024

SIGNATURE: _____



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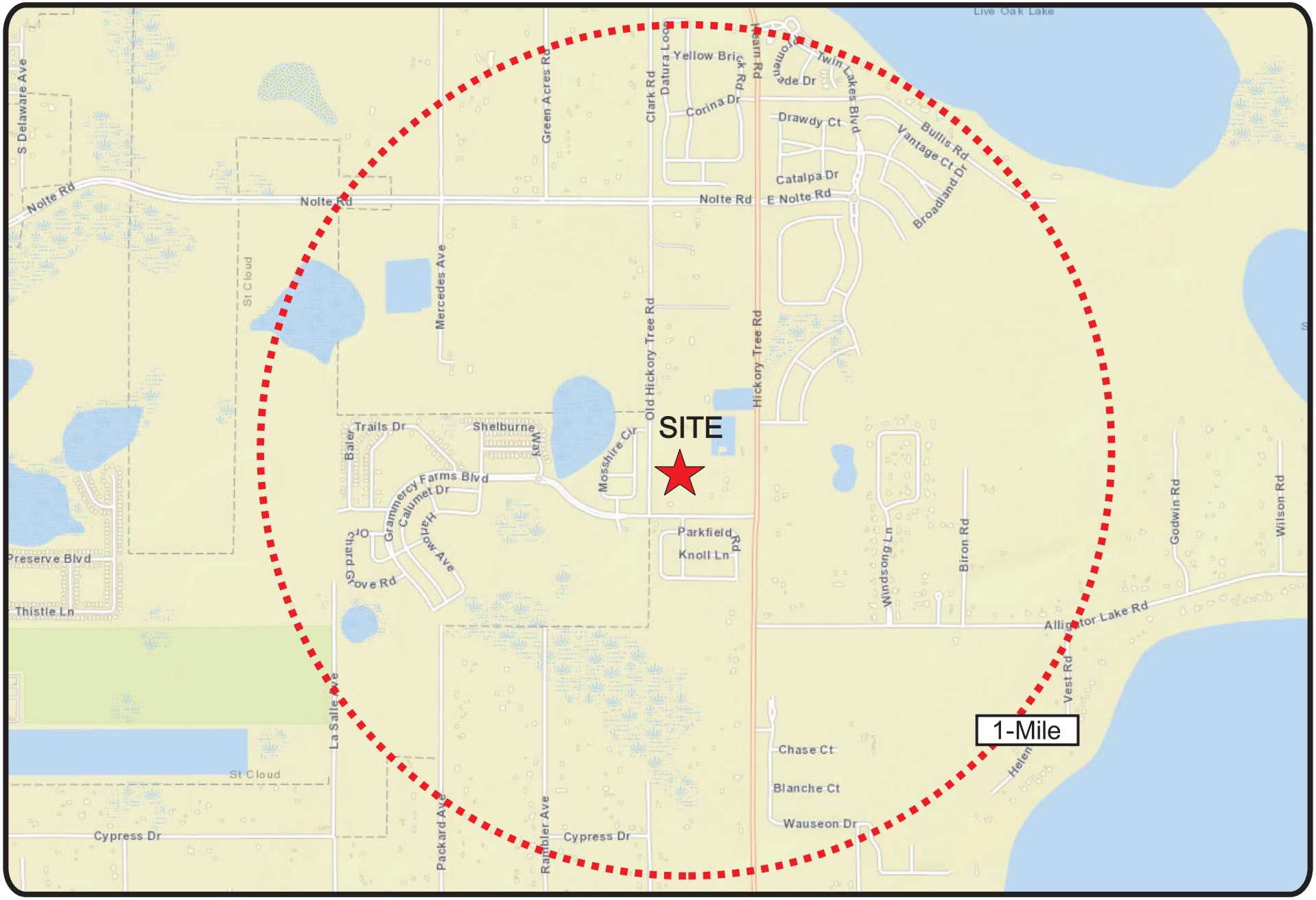
INTRODUCTION

This traffic analysis was performed to assess the impact of the proposed Old Hickory Tree Estates development in the City of St. Cloud, Florida. The site, as depicted in **Figure 1**, is located on the northeast corner of Old Hickory Tree Road and Gramercy Farms Boulevard/Old Hickory Tree Road. The proposed development will consist of a 54-lot single family residential development. Access to the site will be via a full access driveway on Old Hickory Tree Road. **Figure 2** depicts the site plan and access location. The development is expected to be completed in 2025.

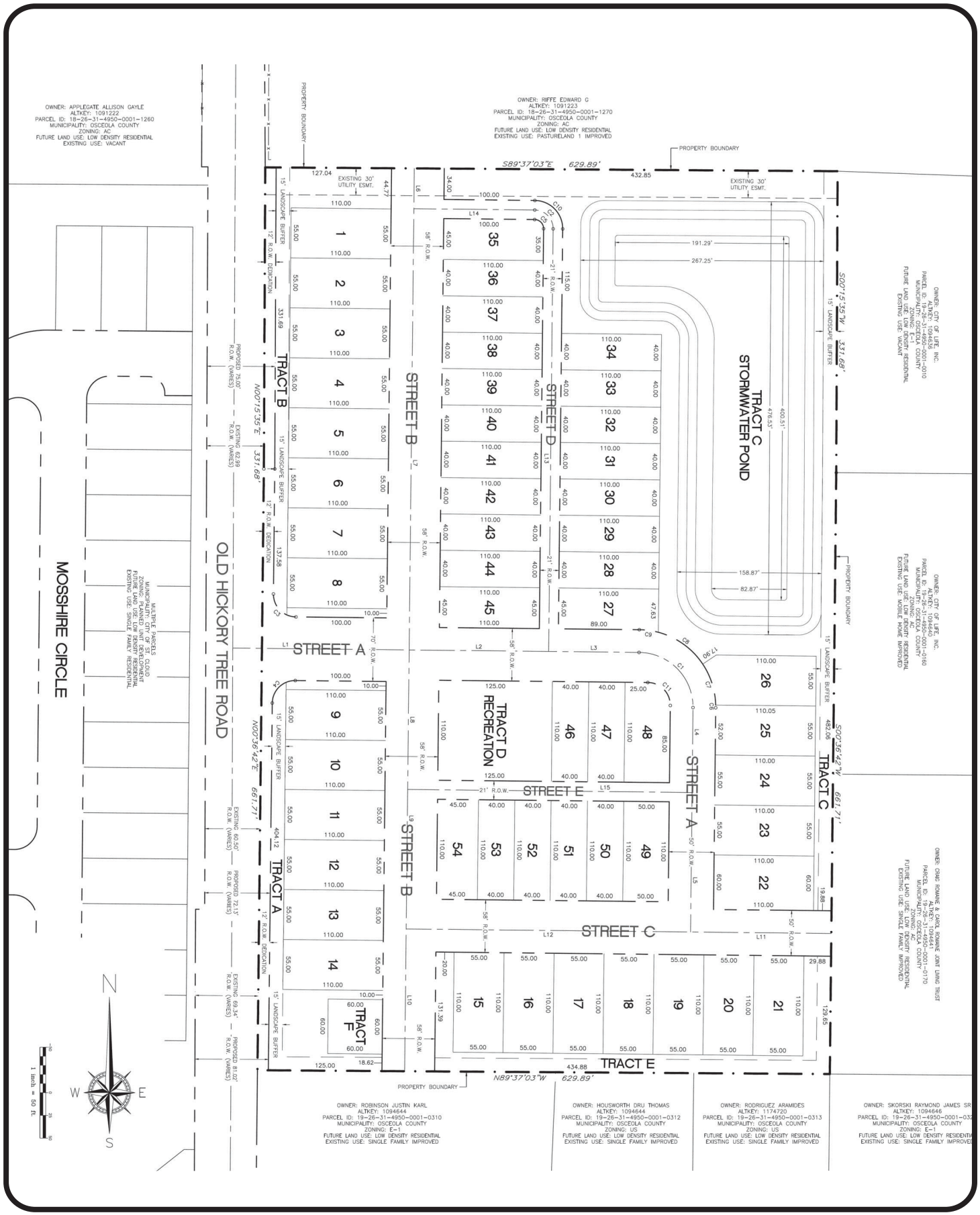
The analysis was conducted in accordance with a study methodology submitted to and reviewed by the City of St. Cloud. The study methodology and related correspondence are included in **Appendix A.** Reference data used in the analysis were obtained from the Osceola County 2024 Existing Roadway Network Capacity Spreadsheets and trip generation data from the Institute of Transportation Engineers (ITE). Additionally, P.M. peak hour traffic data were collected at the intersections by TPD personnel for use in the analysis.



Old Hickroy Tree Estates
Project № 5981
Figure 1

Site Location

N
NTS



Old Hickroy Tree Estates
Project № 5981
Figure 2

Proposed Site Plan

N
NTS

EXISTING CONDITIONS ANALYSIS

Existing traffic conditions were analyzed using P.M. peak hour peak direction volumes for the study roadways and the study intersections. The roadway analysis consisted of a generalized capacity analysis with the existing traffic volumes and the available capacity. The intersection analysis was conducted as per the procedures of the Highway Capacity Manual.

Roadway Segment Analysis

The roadway segments were analyzed by comparing their existing P.M. peak hour volumes with the corresponding peak hour capacities at the adopted Level of Service (LOS) standard. The existing P.M. peak hour volumes, LOS standard, and peak hour capacities were obtained from Osceola County's 2024 Roadway Network Capacity Spreadsheets. A summary of the existing roadway capacity analysis is presented in **Table 1.** This table indicates that the study roadway segments are currently operating at satisfactory Levels of Service except for the segment of Hickory Tree Road from US 192 to Nolte Road which is currently operating at capacity with a V/C ratio of 1.00. The Osceola County's 2024 Roadway Network Capacity Spreadsheet is included in **Appendix B**.

Table 1
Existing Roadway Capacity Analysis

Count Stn	Roadway Segment	# of Lns	Fun Class	Adopted (1)		Existing P.M. (1)			
				Cap	LOS Std	Vol	Dir	V/C	LOS
Hickory Tree Road									
540	US192 to Nolte Rd	2L	Minor Art	870	D	867	SB	1.00	D
548	Nolte Rd to Deer Run Rd	2L	Minor Art	1,140	D	609	SB	0.53	C
Nolte Road									
NA4	Michigan Ave to Hickory Tree Rd	4LD	Collector	1,850	D	759	EB	0.41	B
Old Hickory Tree Rd									
529	Nolte Rd to US192-441	2L	Collector	830	D	477	SB	0.57	B

Notes:

(1) Based on Osceola County's 2024 CMP Database

Intersection Analysis

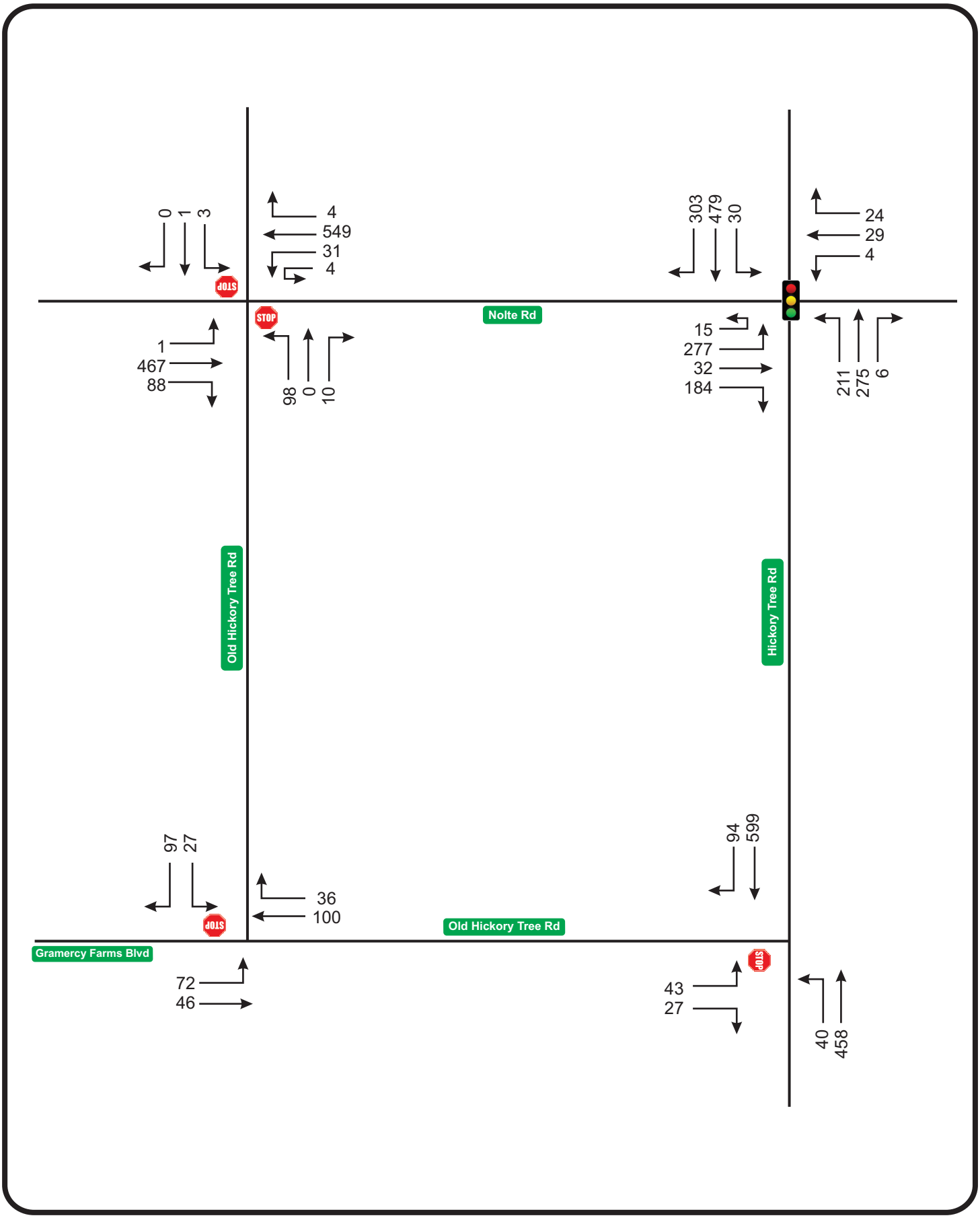
A capacity analysis was conducted for the study intersections using the *Highway Capacity Software (HCS)* in accordance with the procedures of the *Highway Capacity Manual (HCM)*. The capacity analysis was performed using the existing intersection geometry, traffic volumes during the P.M. peak hours and traffic controls. Existing turning movement counts obtained by TPD were made on September 12, 2024, when the FDOT seasonal factor was 1.02 and therefore were adjusted accordingly. The adjusted intersection volumes are displayed in **Figures 3.** The intersection turning movement counts, FDOT seasonal factors and signal timings are included in **Appendix C**. The intersection capacity analysis is summarized in **Table 2**. The analysis indicates that the study intersections are currently operating at satisfactory Levels of Service. Detailed capacity analysis worksheets are included in **Appendix D**.

Table 2
Existing P.M. Peak Hour Intersection Capacity Analysis

Intersection	Control	EB		WB		NB		SB		Overall	
		Delay	LOS	Delay	LOS	Delay	Delay	Delay	LOS	Delay	LOS
Nolte Rd & Old Hickory Tree Rd	Stop	0.0	A	0.5	A	18.5	C	17.3	C	--	--
Nolte Rd & Hickory Tree Rd	Signal	32.6	C	44.0	D	23.4	C	33.3	C	30.8	C
Old Hickory Tree Rd & Gramercy Farms Blvd*	Stop	4.7	A	--	--	--	--	9.8	A	--	--
Old Hickory Tree Rd & Hickory Tree Rd	Stop	31.6	D	--	--	0.8	A	--	--	--	--

Note:

* EB & SB approaches are stop controlled, HCS analysis was run as SB stop control only to produce results



Old Hickroy Tree Estates
Project № 5981
Figure 3

Existing P.M. Peak Hour Traffic Volumes

N
NTS

Planned and Programmed Improvements

Based on a review of the roadway improvements programmed within the Metroplan Orlando Urban Area Transportation Improvement Program (TIP) and the Osceola County roadway projects, the following roadway improvements were identified within the project's impact area:

- Hickory Tree Road – from US 192 (south) to US 192 (north)
    - Osceola County is conducting a PD&E study which will evaluate the widening of the existing two-lane roadway to a four-lane divided urban roadway in addition to multi-modal improvements.
    - The project is not yet funded for design or construction
    - Additionally, multi-modal transportation improvements including continuous sidewalk and buffered bicycle lanes will be evaluated.

This project will help improve capacity and enhance safety along the road. Excerpts outlining this project are included in **Appendix E.**

PROPOSED DEVELOPMENT AND TRIP GENERATION

The proposed development will consist of a 54-lot single family residential development. To determine the impact of this development, an analysis of its trip generation characteristics was conducted. This included the determination of the trips to be generated as well as their distribution and assignment to the surrounding roadways.

Trip Generation

Trip generation rates were obtained from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition. A summary of the trip generation of the proposed development is shown in Table 3. The ITE trip generation sheets were included in the study methodology, provided in Appendix A. The development is expected to generate 572 daily trips, of which 43 will occur in the A.M. peak hour and 56 will occur in the P.M. peak hour.

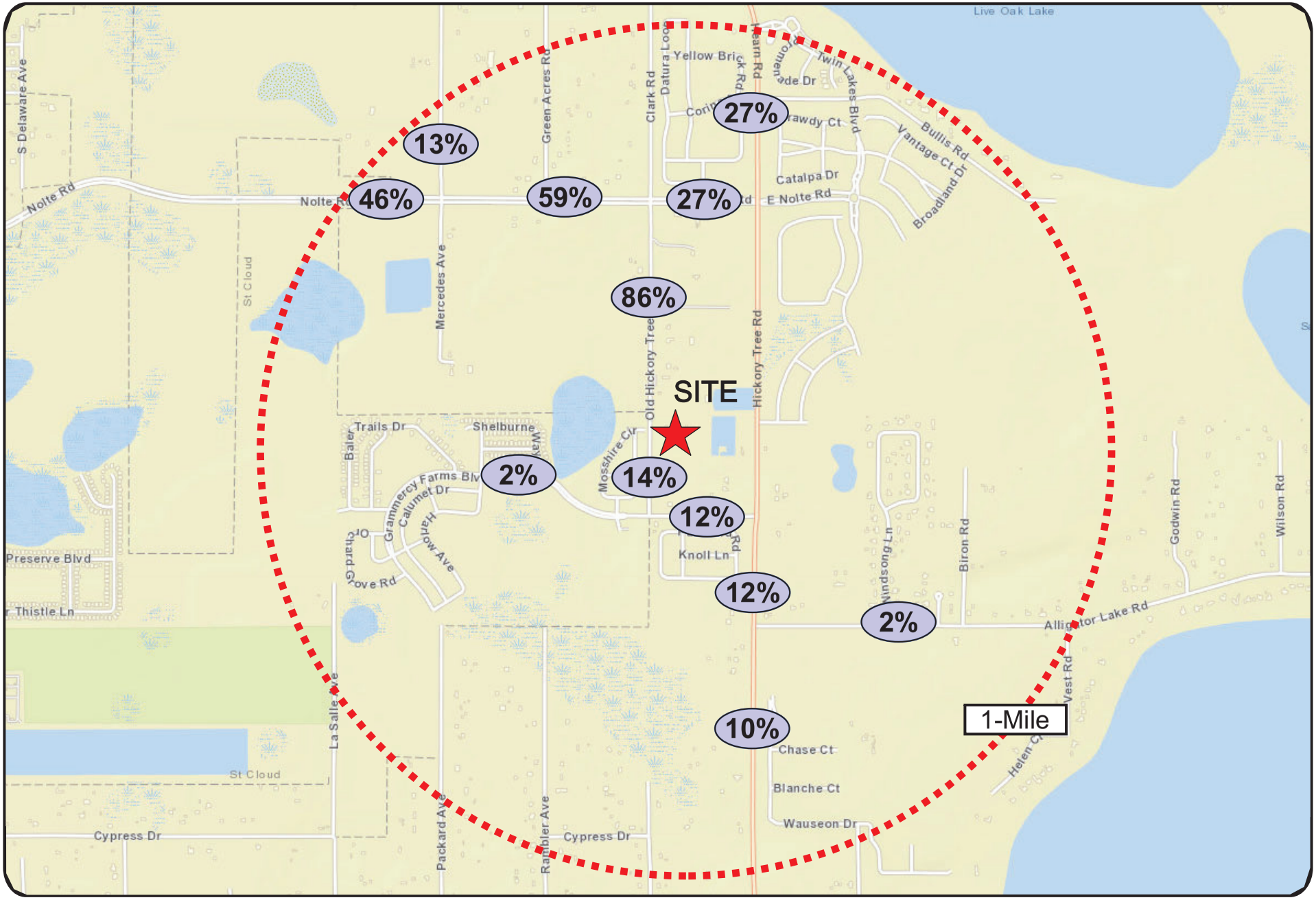
Table 3
Trip Generation Summary

ITE LUC	Land Use	Size (DU)*	Daily		A.M. Peak Hour				P.M. Peak Hour			
			Rate**	Trips	Rate**	Enter	Exit	Total	Rate**	Enter	Exit	Total
210	Single-Family Detached Housing	54	10.59	572	0.80	11	32	43	1.04	35	21	56
Total Trips				**572**	**--**	**11**	**32**	**43**	**--**	**35**	**21**	**56**

*DU = Dwelling Units
**ITE equations were used, more than 20 data points

Trip Distribution and Assignment

The estimated distribution of the project trips in the area was estimated using the currently adopted Central Florida Regional Planning Model (CFRPM). The model was run with a Select Zone Analysis which produced a distribution for the project trips. The model distribution plot is included in the Study Methodology (Appendix A). A Select Zone Analysis (SZA) was conducted by modifying the 2035 interim year model network to include a Traffic Analysis Zone (TAZ) representing the proposed project and the model's socioeconomic data updated to reflect the proposed project buildout. **Figure 4** illustrates the model-generated trip distribution on the area roadways in the project vicinity. This distribution will be used to assign the project trips to the study roadways and intersections.



Old Hickroy Tree Estates
Project № 5981
Figure 4

Project Trip Distribution

N
NTS

PROJECTED TRAFFIC CONDITIONS

Projected traffic conditions were analyzed for the study roadway segments and intersections/site entrance during P.M. peak hour. Projected traffic volumes used in the analysis consisted of background traffic combined with site generated traffic. Background traffic volumes were determined by expanding existing peak hour traffic volumes to the buildout year with the use of an annual growth rate. Trends analysis of historical AADT data obtained from Osceola County interactive website indicated growth rates averaging 6.4% per year. Based upon the City's requirements, the higher of a minimum of 5% annual growth rate or the trends analysis shall be used in the analysis. Therefore, a growth factor of 6.5 % (or 1.065) was utilized in the analysis for a projected buildout of 2025. The trends analysis worksheets are provided in **Appendix F**.

Roadway Segment Analysis

The projected roadway segments analysis was performed by comparing the projected traffic volume of each segment with the capacity of the segment at the adopted LOS standard. The analysis as summarized in **Table 4** shows the study segments along with their number of lanes, adopted LOS/capacity, projected traffic volumes (background and project) and resultant Levels of Service. Similar to existing conditions, the study roadway segments will continue to operate at satisfactory Levels of Service except for the segment of Hickory Tree Road from US 192 to Nolte Road. This segment is currently operating at capacity and the project will be adding minimal trips (9 trips) and will consume 1.09% of its adopted capacity. It should be noted that Osceola County is conducting a PD&E study for this segment to evaluate the widening to a 4-lane roadway.

Intersection Analysis

To assess the projected operating conditions at the study intersections and site access driveway, intersection capacity analyses were conducted using the *Highway Capacity Software (HCS)* in accordance with the procedures of the *Highway Capacity Manual (HCM)*. **Figure 5** shows the projected P.M. peak hour intersection turning movements for the study intersections. The analysis as summarized in **Table 5** indicates that the study intersections will continue to operate at overall acceptable Levels of Service. Detailed printouts of the analysis are included in **Appendix G**.

Table 4
Projected Roadway Capacity Analysis

Count Stn	Roadway Segment	# of Lns	Adopted (1)		Projected P.M. Traffic						Projected Capacity Exceeded?	Significance
			Cap	LOS Std	Bckgrn'd Vol (1)	Dir	Trip Dist (2)	Proj Trips	Total	V/C		
Hickory Tree Road												
540	US192 to Nolte Rd	2L	870	D	923	SB	27%	9	933	1.07	Yes	1.09%
548	Nolte Rd to Deer Run Rd	2L	1,140	D	649	SB	12%	3	651	0.57	No	0.22%
Nolte Road												
NA4	Michigan Ave to Hickory Tree Rd	4LD	1,850	D	808	EB	59%	21	829	0.45	No	1.12%
Old Hickory Tree Rd												
529	Nolte Rd to US192-441	2L	830	D	508	SB	13%	5	513	0.62	No	0.55%

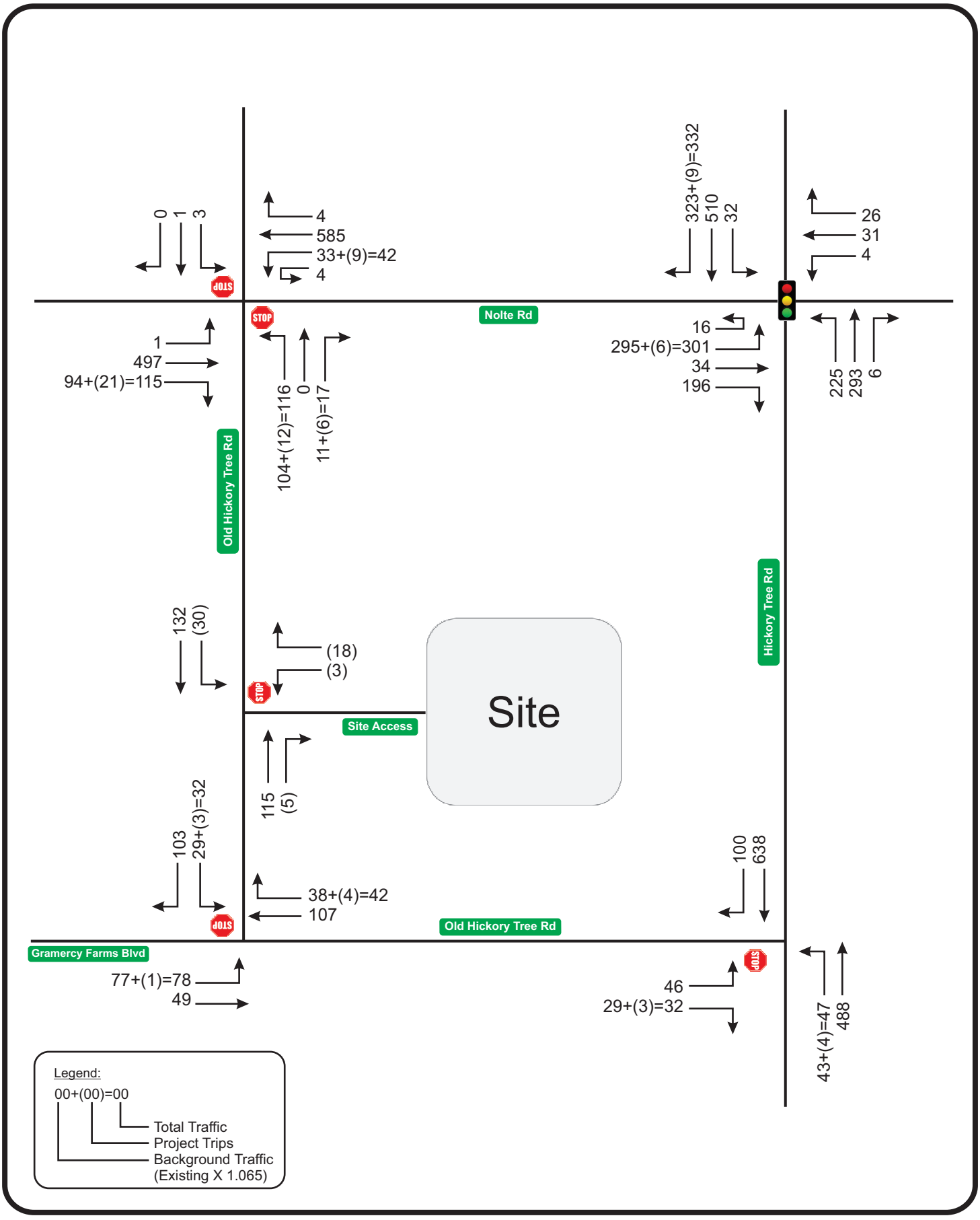
Notes:

(1) Background = Existing X 1.065

(2) Highest distribution on the segment

Table 5
Projected P.M. Peak Hour Intersection Capacity Analysis

Intersection	Control	EB		WB		NB		SB		Overall	
		Delay	LOS	Delay	LOS	Delay	Delay	Delay	LOS	Delay	LOS
Nolte Rd & Old Hickory Tree Rd	Stop	0.0	A	0.7	A	21.1	C	18.8	C	--	--
Nolte Rd & Hickory Tree Rd	Signal	35.1	D	48.2	D	26.2	C	36.2	D	33.7	C
Old Hickory Tree Rd & Gramercy Farms Blvd	Stop	4.8	A	--	--	--	--	10.0	B	--	--
Old Hickory Tree Rd & Hickory Tree Rd	Stop	39.2	E	--	--	0.9	A	--	--	--	--
Old Hickory Tree Road & Site Access	Stop	--	--	9.3	A	--	--	1.6	A	--	--



Old Hickroy Tree Estates
Project № 5981
Figure 3

Existing P.M. Peak Hour Traffic Volumes

N
NTS

Turn Lane Analysis

As previously mentioned, access to the site is provided via a full access driveway on Old Hickory Tree Road. The site will be providing a southbound left turn lane to serve the project. The recommended length of this left turn lane is calculated as follows:

Total Turn Lane Length Required = Vehicular Deceleration Distance + Queue Storage

Deceleration at 45 mph = 185‘ (incl. 50’ taper), per FDOT Design Standards Manual 212

Queue = 95th percentile queue from HCS output worksheets

= 0.1 (use 1) veh/ln X 25 ft/veh = 25 ft

Total Turn Lane Length Required = 185’ + 25’ = **210’**

MULTI-MODAL MOBILITY REVIEW

A review was conducted of available multi-modal transportation facilities in the vicinity of the site. This included a review of the available motorized and non-motorized options.

Sidewalks and Pedestrian Facilities

A survey of the existing sidewalks and crosswalks was conducted using aerial photography. A sidewalk is available on west side of Old Hickory Tree Road, adjacent to the site. Sidewalks are also available on both sides of Hickory Tree Road south of the project's site. The sidewalks appear to be in good condition. The project will be providing sidewalks on the east side of Old Hickory Tree Road adjacent to the site.

Bicycle Facilities

The study roadways and local roadway network were surveyed to identify any dedicated bicycle facilities that may be available to facilitate bicycle travel in the area. No bicycle lanes were identified within the project's area.

Fixed-Route Bus Service

The Lynx Transit route maps were reviewed to identify any fixed route bus service routes within the vicinity of the site, and it was determined that no fixed bus service within the project's area.

STUDY CONCLUSIONS

This traffic analysis was performed to assess the impact of the proposed Old Hickory Tree Estates development in the City of St. Cloud, Florida. Located on the northeast corner of Old Hickory Tree Road and Gramercy Farms Boulevard/Old Hickory Tree Road, the proposed development will consist of a 54-lot single family residential development. Access to the site will be via a full access driveway on Old Hickory Tree Road. The development is expected to be completed in 2025. The results of the study as documented herein are summarized below:

- The development is estimated to generate 572 daily trips, of which 43 will occur during the A.M. peak hour and 56 during the P.M. peak hour.

- The study roadway segments are currently operating at satisfactory Levels of Service except for the segment of Hickory Tree Road from US 192 to Nolte Road which is currently operating at capacity with a V/C ratio of 1.00. The study segments will continue to operate at acceptable Levels of Service, except for the segment of Hickory Tree Road from US 192 to Nolte Road, similar to existing conditions. This segment is currently operating at capacity and the project will be adding minimal trips (9 trips) and will consume 1.09% of its adopted capacity. It should be noted that Osceola County is conducting a PD&E study for this segment to evaluate the widening to a 4-lane roadway. The study is not yet funded for design or construction.

- The study intersections currently operate at overall acceptable Levels of Service, and will continue to operate satisfactorily upon the addition of background and project trips.

- Access to the site is proposed via a full access driveway on Old Hickory Tree Road. The site access driveway is proposed to operate satisfactorily upon buildout of the project. The site will be providing a southbound left turn lane to serve the project. The recommended length of this left turn lane is 210’ feet.

APPENDICES

APPENDIX A

Study Methodology & Correspondence

From:	Cameron Crandell
To:	Mina Atassi
Cc:	Rita Merhi; Youssef Elsebaie; Naol Barkessa
Subject:	RE: Old Hickory Tree Estates (TPD 5981)
Date:	Thursday, September 5, 2024 3:33:22 PM
Attachments:	image001.png

Mina,

We do not have any comments on the methodology and consider it approved. We look forward to reviewing the traffic study.

Thank you,

Cameron Crandell, PE
Deputy Public Works Director
1300 9th Street
St. Cloud, FL 34769
P: 407-957-7279
Please note new email: cameron.crandell@stcloudfl.gov
www.StCloudFL.gov

From: Mina Atassi <mina@tpdtraffic.com>
Sent: Thursday, August 29, 2024 5:19 PM
To: Cameron Crandell <cameron.crandell@stcloudfl.gov>
Cc: Rita Merhi <rita@tpdtraffic.com>; Youssef Elsebaie <youssef@tpdtraffic.com>
Subject: Old Hickory Tree Estates (TPD 5981)

Good Afternoon,

We are working on preparing a traffic study for a development located on Old Hickory Tree Road consisting of 54 single family units. We have prepared the attached methodology and would like to get feedback and review from the City before proceeding, per the City's guidelines.

Would you please review this methodology or direct us to someone who can review it for us?

Thank you in advance for your time and have a great evening.

Regards,

TO: Cameron Crandell, Deputy Public Works Director
City of St. Cloud, Florida

FROM: Turgut Dervish, P.E.

DATE: August 29, 2024

RE: Old Hickory Tree Estates – TIA Methodology
City of St. Cloud, Osceola County
TPD № 5981

The following is our proposed traffic study methodology for the Traffic Impact Analysis (TIA) for the above-referenced development located on the northeast corner of Old Hickory Tree Road and Gramercy Farms Boulevard/ Old Hickory Tree Road in the City of St. Cloud. **Figure 1** depicts the site location. The analysis will be conducted as per City of St. Cloud procedures and requirements. In accordance with these guidelines, this memorandum outlines the proposed methodology by which the analysis will be conducted.

1. Proposed Development

The proposed development consists of a 54-lot single family residential development. **Figure 2** depicts the site plan and its access configuration. Access to the site will be via a full access driveway on Old Hickory Tree Road.

2. Trip Generation

The trip generation of the proposed development will be calculated with the use of trip generation rates from the *11th Edition of the ITE Trip Generation Manual.* The calculation is summarized in **Table 1**. Detailed trips generation worksheets can be found in **Attachment A**. As shown in the table, the proposed development is estimated to generate 572 new daily trips, of which 43 will occur during the A.M. peak hour and 56 during the P.M. peak hour.

ITE LUC	Land Use	Size (DU)*	Daily		A.M. Peak Hour				P.M. Peak Hour			
			Rate**	Trips	Rate**	Enter	Exit	Total	Rate**	Enter	Exit	Total
210	Single-Family Detached Housing	54	10.59	572	0.80	11	32	43	1.04	35	21	56
Total Trips				**572**	**--**	**11**	**32**	**43**	**--**	**35**	**21**	**56**

*DU = Dwelling Units **ITE equations were used, more than 20 data points



Old Hickroy Tree Estates
Project № 5981
Figure 1

Site Location

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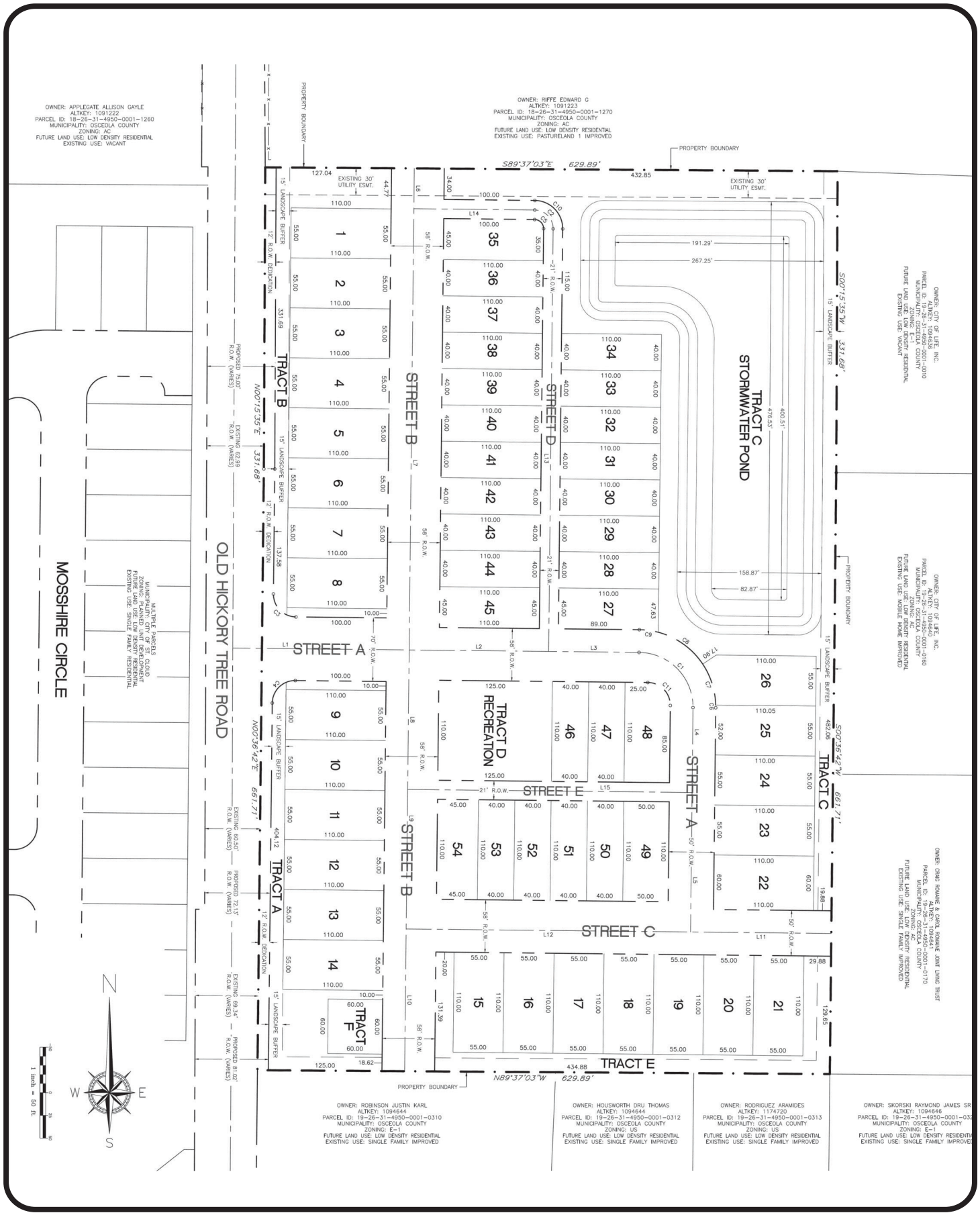


Old Hickroy Tree Estates
Project № 5981
Figure 2

Site Plan

NTS

3. Trip Distribution

The estimated distribution of the project trips in the area will be based upon the currently adopted Central Florida Regional Planning Model (CFRPM). The model was run with a Select Zone Analysis which produced a distribution for the project trips. The model distribution plot is included in **Attachment B**. A Select Zone Analysis (SZA) was conducted by modifying the 2035 interim year model network to include a Traffic Analysis Zone (TAZ) representing the proposed project and the model's socioeconomic data updated to reflect the proposed project buildout. **Figure 3** illustrates the model-generated trip distribution on the area roadways in the project vicinity. This distribution will be used to assign the project trips to the study roadways and intersections.

4. Traffic Impact Area

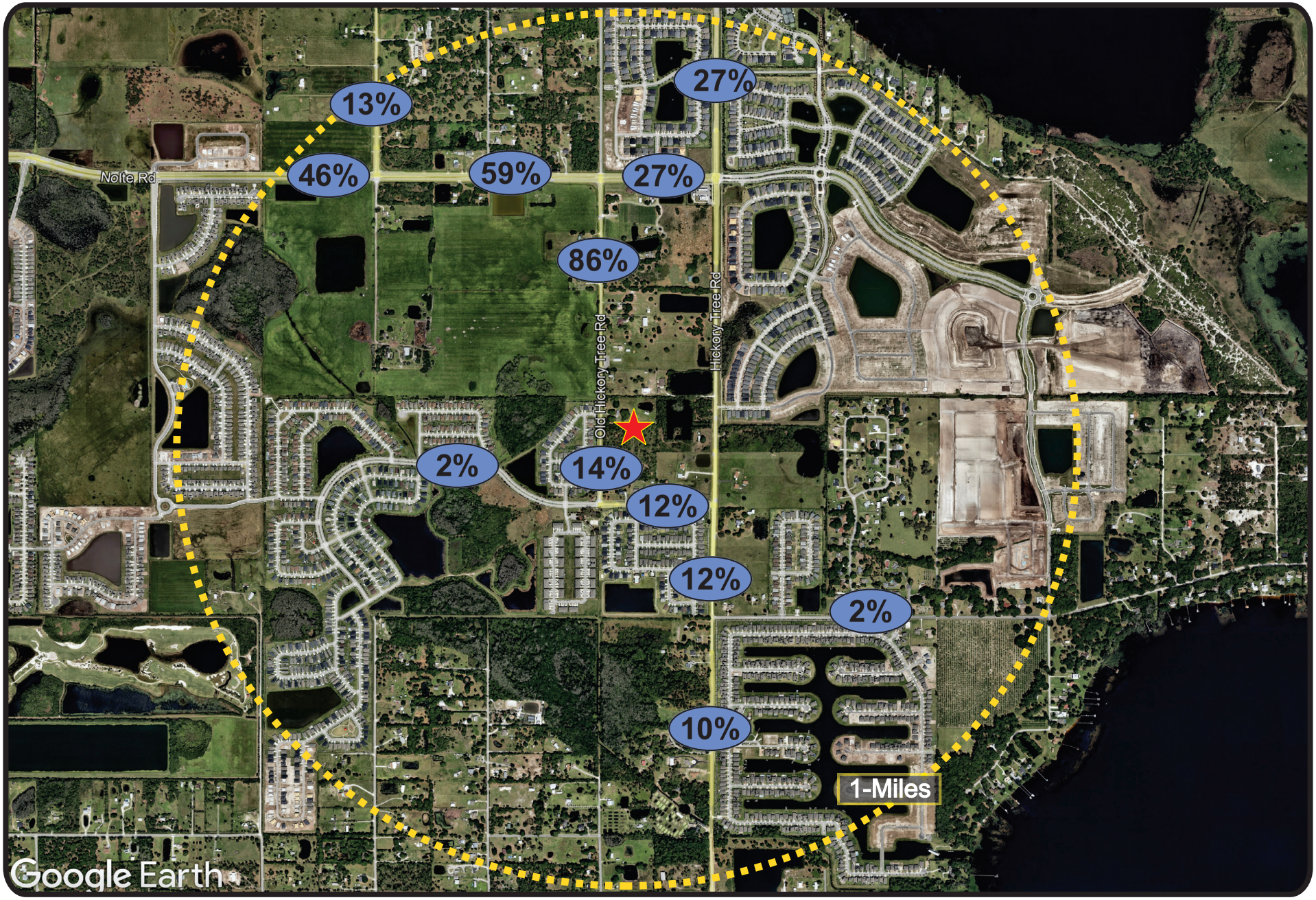
As per the City's guidelines, the analysis will be a Tier 2 "Minor Development Traffic Study" with the impact area of one-mile from the project site. All major roadways along with the signalized and major unsignalized intersections within this area radius as directed by the County Traffic Operations Engineer (CTOE) will be reviewed and if significantly impacted, will be included in the analysis. The following segments and intersections will be included:

Study Roadway Segments

- Hickory Tree Road
    - US 192 to Nolte Road
    - Nolte Road to Deer Run Road
- Old Hickory Tree Road
    - Nolte Road to US 192-441
- Nolte Road
    - Michigan Avenue to Hickory Tree Road

Study Intersections:

- Old Hickory Tree Road and Gramercy Farms Boulevard
- Old Hickory Tree Road and Hickory Tree Road
- Old Hickory Tree Road and Nolte Road
- Hickory Tree Road and Nolte Road
- Site Access Driveway on Old Hickory Tree Road



Old Hickroy Tree Estates
Project № 5981
Figure 3

Trip Distribution

N
NTS

5. Traffic Impact Assessment

To assess the impact of the project traffic on the above-mentioned study roadways/ intersections, the following steps will be followed in the analysis:

Roadways

- Determine background traffic volumes on impacted roadways by expanding the traffic volumes to the buildout year with the use of growth factors from historical growth trend of daily volumes with a minimum growth rate of 5% or vested trips to be provided by the County, whichever is greater.

- Combine project traffic with background traffic to obtain total traffic flows.

- Perform traffic analysis utilizing capacities obtained from the County's Roadway Database (latest version).

- Information on planned and programmed roadways within a one-mile radius will be obtained from the County for use in the analysis.

Intersections

- Conduct intersection counts during the P.M. peak period (4-6 P.M.) at the study intersections. FDOT seasonal factor will be applied to the counts.

- Combine project traffic with background traffic to obtain total traffic.

- Perform intersection capacity analysis utilizing the latest HCS or Synchro operational analysis procedures for the P.M. peak hour.

- Conduct a turn lane analysis based upon City of St. Cloud Land Development Code (LDC), Section 6.7.1 criteria for turn lanes. This includes determining the storage lengths utilizing the 95th percentile queues at the site access driveways, which will be obtained from the intersection analysis.

6. Planned and Programmed Improvements

Based on a review of the roadway improvements programmed within the Metroplan Orlando Urban Area Transportation Improvement Program (TIP) and the Osceola County roadway projects, the following roadway improvements were identified within the project's impact area:

- Hickory Tree Road – from US 192 (south) to US 192 (north)
    - Osceola County is conducting a PD&E study which will evaluate the widening of the existing two-lane roadway to a four-lane divided urban roadway in addition to multi-modal improvements.
    - The project is not yet funded for design or construction

7. Multi-Modal Assessment

A multi-modal assessment will be conducted to evaluate transit, bicycle and pedestrian facilities in the vicinity of the proposed project. This will include a ¼-mile walking distance from the proposed development and a determination of the overall multi-modal facilities available closest to the proposed development.

8. Traffic Report

A traffic report will be prepared documenting the study procedures, analysis and calculations/ recommendations.

Attachment A
ITE Trip Generation Sheets

Single-Family Detached Housing
(210)

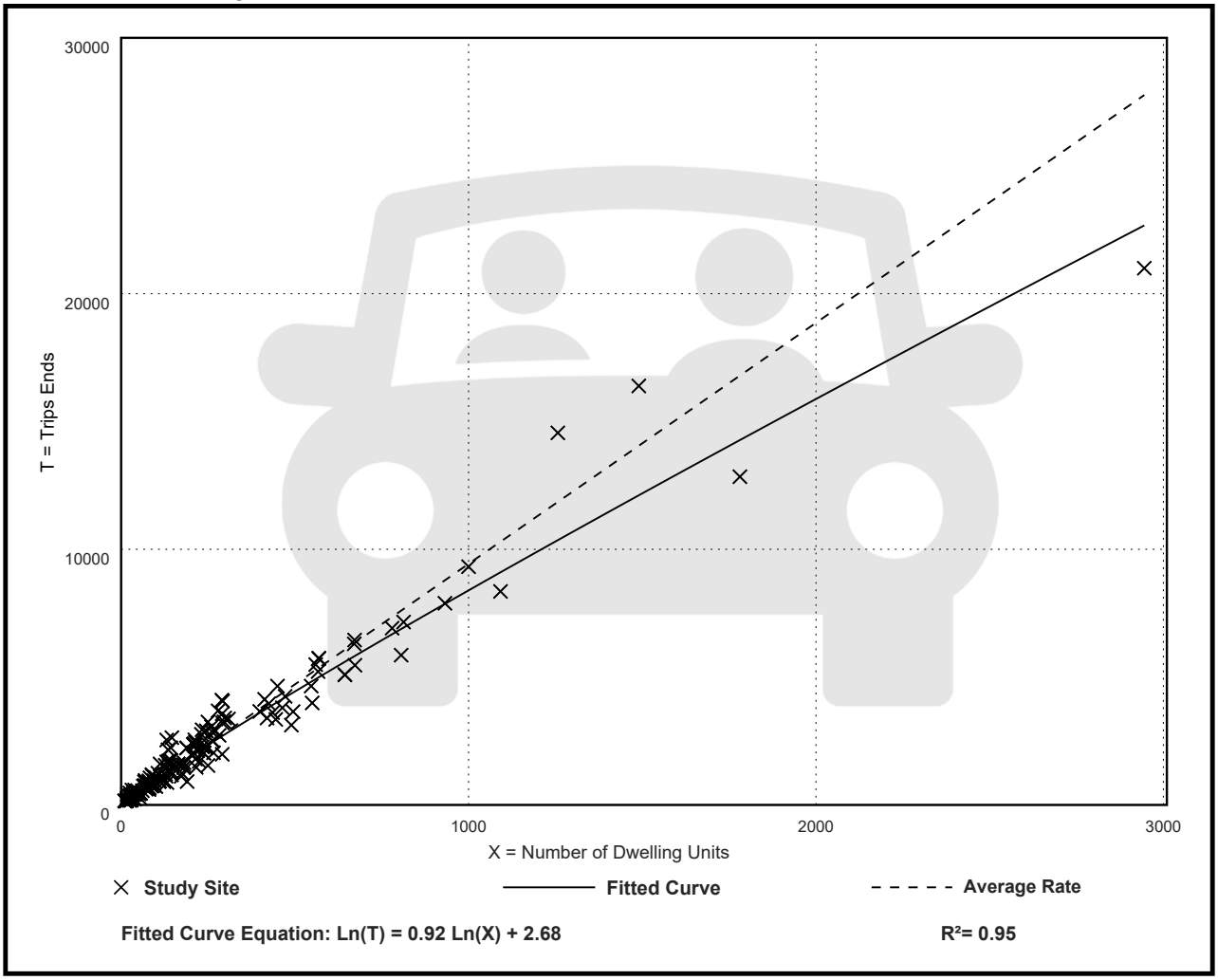
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 174
Avg. Num. of Dwelling Units: 246
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.43	4.45 - 22.61	2.13

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.92 Ln(X) + 2.68

R^2= 0.95

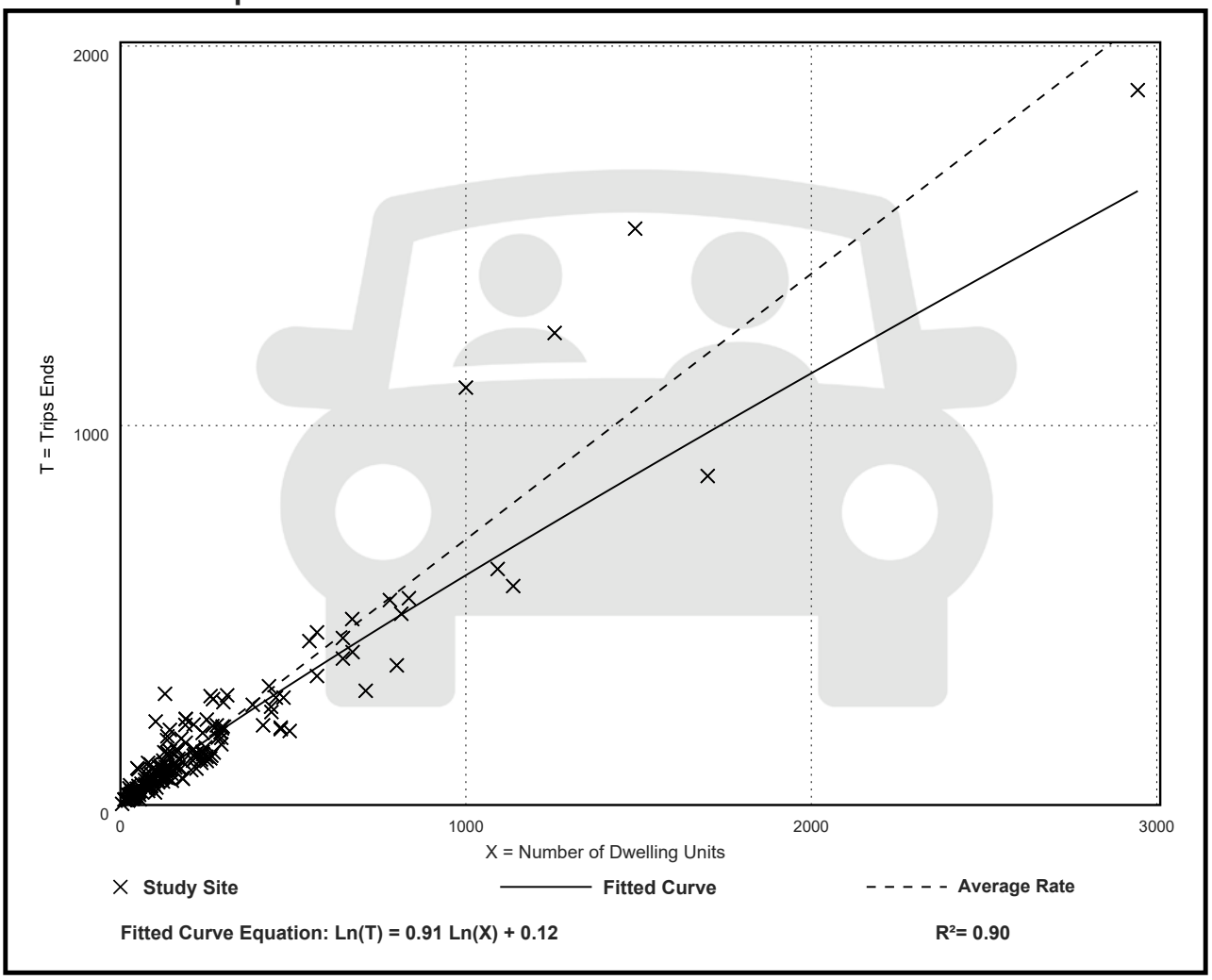
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 192
Avg. Num. of Dwelling Units: 226
Directional Distribution: 26% entering, 74% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.70	0.27 - 2.27	0.24

Data Plot and Equation



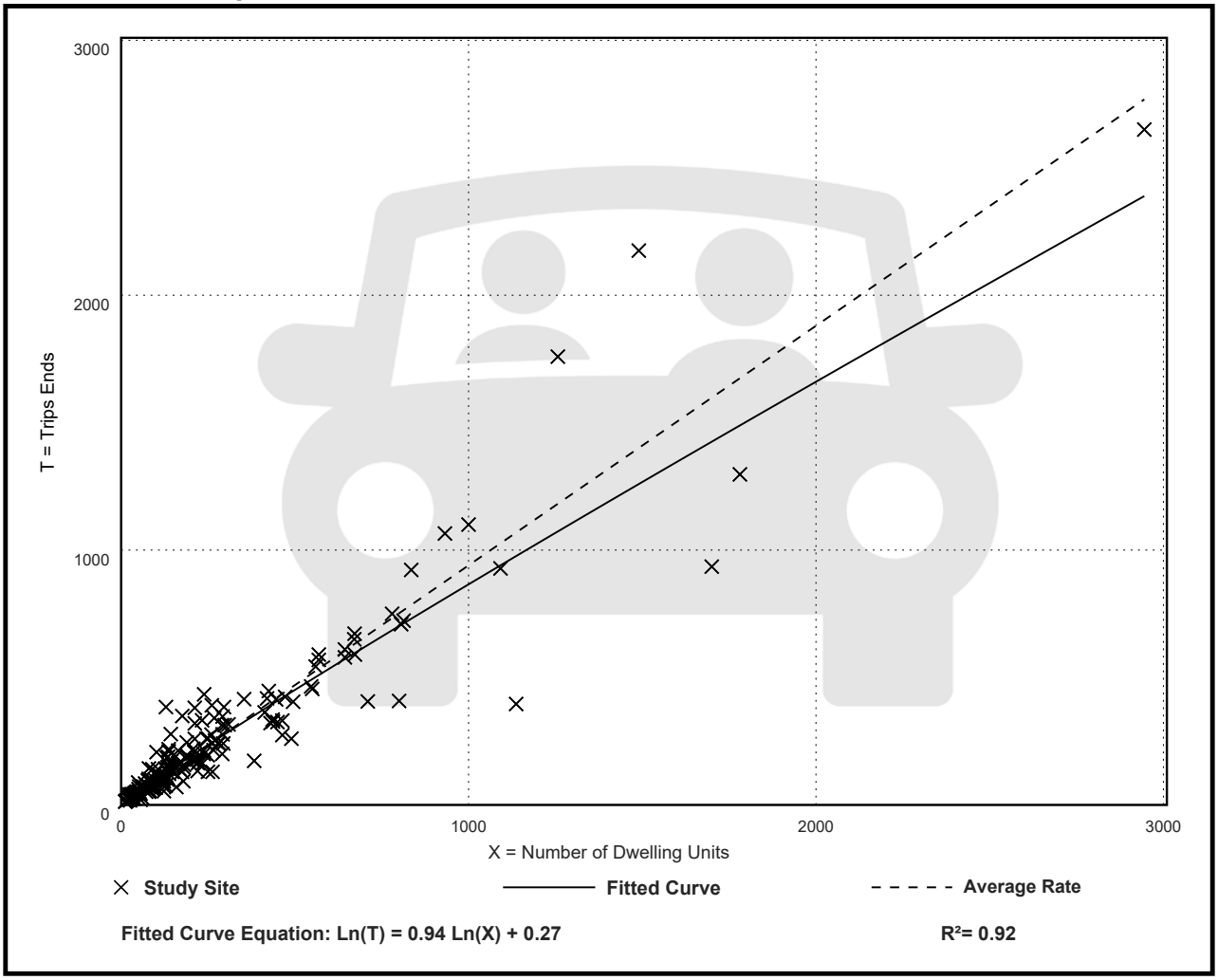
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 208
Avg. Num. of Dwelling Units: 248
Directional Distribution: 63% entering, 37% exiting

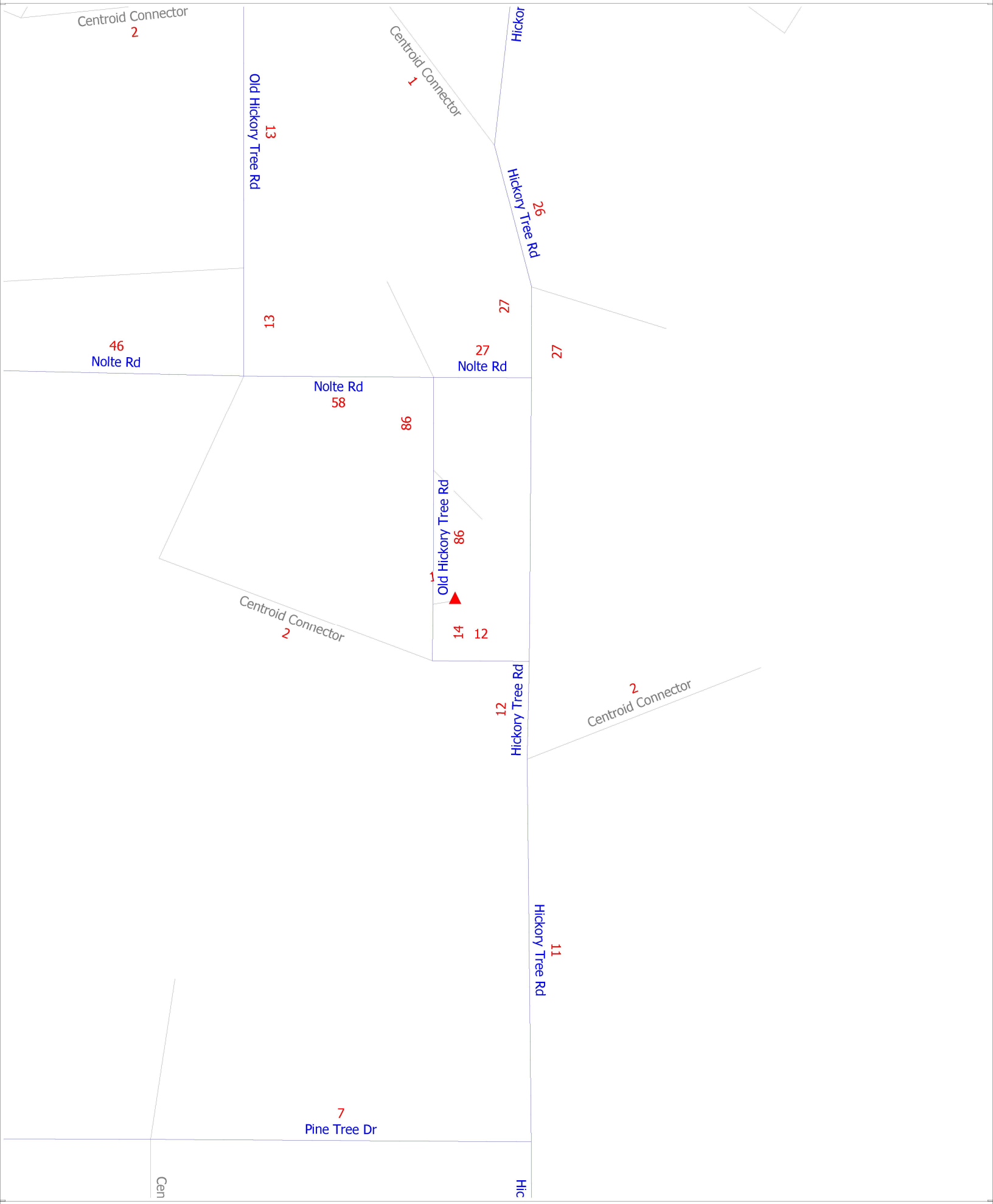
Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.94	0.35 - 2.98	0.31

Data Plot and Equation



Attachment B
Model Trip Distribution Plot



(Licensed to Traffic Planning and Design, Inc.)

APPENDIX B

2024 Roadway Network Spreadsheet Capacity Report

2024 Roadway Network Capacity Report

(Updated 05/14/2024)

Count Station #	Count Source	ROADWAY	FROM	TO	Area Type (U/T/R)	Facility Type	Functional Class	Adjusted Service Volumes (Peak Hour Peak Direction)				Latest Count Year	Count Date (mm/dd)	Week	ADT	AADT	PM Peak Hour									
								B	C	D	E						NB/EB	SB/WB	Pk Hr Total	Pk Dir	K-Factor	D-Factor	Pk Hr Pk Dir Vol	LOS	Capacity	V/C
232	OC	Ham Brown Rd	Reaves Rd	Cattle Drive Ln	U	H	Collector	400	800	1,140	1,440	2024	4/2	14	11,689	11,455	301	687	988	SB/WB	0.085	0.70	687	C	1,140	0.60
203	OC	Ham Brown Rd	Cattle Drive Ln	US 17/92	U	H	Collector	400	800	1,140	1,440	2024	2/21	8	14,632	14,339	309	710	1,019	SB/WB	0.070	0.70	710	C	1,140	0.62
407	OC	Henry Partin Rd	Kings Hwy	Neptune Rd	U	A1	Local	330	530	570	570	2012	3/27	13	4643	4,550	135	254	389	SB/WB	0.0838	0.65	254	B	570.00	0.45
540	OC	Hickory Tree Rd	US 192 (West)	Nolte Rd	U	A1	Minor Art	500	810	870	870	2024	3/21	12	17,047	16,536	529	867	1,396	SB/WB	0.082	0.62	867	D	870	1.00
548	OC	Hickory Tree Rd	Nolte Rd	Deer Run Rd	U	H	Minor Art	400	800	1,140	1,440	2024	3/20	12	15,762	15,289	605	609	1,214	SB/WB	0.077	0.50	609	C	1,140	0.53
531	OC	Hickory Tree Rd	Deer Run Rd	US 192 (East)	T	H	Collector	420	800	1,120	1,420	2024	3/20	12	4,162	4,037	172	209	381	SB/WB	0.092	0.55	209	B	800	0.26
23	OC	Hoagland Blvd	US 17/92	US 192	U	A1	Minor Art	1,470	1,790	1,850	1,850	2024	2/21	8	22,083	21,641	569	1058	1,627	SB/WB	0.074	0.65	1,058	B	1,850	0.57
9002	OC	Hoagland Blvd	US 1792	Jack Calhoun Dr N	U	A1	Minor Art	1,470	1,790	1,850	1,850	2024	2/21	8	15,419	15,111	733	411	1,144	NB/EB	0.074	0.64	733	B	1,850	0.40
302	OC	Jack Calhoun Dr	N Hoagland Blvd	S Hoagland Blvd	U	A1	Minor Art	480	770	830	830	2024	2/21	8	4,479	4,389	204	138	342	NB/EB	0.076	0.60	204	B	830	0.25
152	OC	International Drive South	US 192	Orange County Line	U	A1	Collector	2,270	2,700	2,780	2,780	2024	2/27	9	17,315	16,796	886	557	1,443	NB/EB	0.083	0.61	886	B	2,780	0.32
160111	FDOT	Interstate 4	Osceola Polk Line Rd (CR 532)	SR 429	U	F	Freeway	3,300	4,580	5,580	6,200	2023	N/A	N/A	N/A	128,000	N/A		N/A	N/A	N/A	N/A	N/A	N/A	5,580	NA
920321	FDOT	Interstate 4	SR 429	World Dr	U	F	Freeway	3,300	4,580	5,580	6,200	2023	N/A	N/A	N/A	777,000	N/A		N/A	N/A	N/A	N/A	N/A	N/A	5,580	NA
920316	FDOT	Interstate 4	World Dr	US 192	U	F	Freeway	3,300	4,580	5,580	6,200	2023	N/A	N/A	N/A	106,500	N/A		N/A	N/A	N/A	N/A	N/A	N/A	5,580	NA
750668	FDOT	Interstate 4	US 192	Orange County Line	U	F	Freeway	3,300	4,580	5,580	6,200	2023	N/A	N/A	N/A	123,000	N/A		N/A	N/A	N/A	N/A	N/A	N/A	5,580	NA
553	OC	Jack Brack Rd	Narcoossee Rd (CR 15)	Zuni Rd	T	A1	Local	440	710	760	760	2024	4/3	14	8,706	8,532	378	206	584	NB/EB	0.067	0.65	378	B	710	0.53
5531	OC	Jack Brack Rd	Zuni Rd	Absher Rd	U	A1	Collector	370	590	630	630	2024	3/27	13	3,070	3,009	123	131	254	SB/WB	0.083	0.52	131	B	630	0.21
318	OC	John Young Pkwy	US 192	Columbia Ave	U	A1	Principal Art	2,270	2,700	2,780	2,780	2024	2/21	8	44,268	43,383	1470	1610	3,080	SB/WB	0.070	0.52	1,610	B	2,780	0.58
317	OC	John Young Pkwy	Columbia Ave	Carroll St	U	A1	Principal Art	2,270	2,700	2,780	2,780	2024	2/21	8	45,397	44,489	1450	1725	3,175	SB/WB	0.070	0.54	1,725	B	2,780	0.62
316	OC	John Young Pkwy	Carroll St	Orange County Line	U	A1	Principal Art	2,270	2,700	2,780	2,780	2024	3/7	10	48,415	46,963	1739	1809	3,548	SB/WB	0.073	0.51	1,809	B	2,780	0.65
554	OC	Jones Rd	Narcoossee Rd	Gerry Ct	U	A1	Collector	330	530	570	570	2024	3/27	13	11,037	10,816	484	338	822	NB/EB	0.074	0.59	484	C	570	0.85
405	OC	Kings Hwy	Pine Island Rd	Neptune Rd	U	H	Collector	400	800	1,140	1,440	2024	4/3	14	8,213	8,049	169	461	630	SB/WB	0.077	0.73	461	C	1,140	0.40
505	OC	Kissimmee Park Rd	Old Canoe Creek Rd	Lake Tohopekaliga	T	H	Collector	420	800	1,120	1,420	2024	3/20	12	2,540	2,464	102	130	232	SB/WB	0.091	0.56	130	B	800	0.16
9008	OC	Kissimmee Park Rd	Cross Prairie Pkwy	Turnpike	T	H	Collector	420	800	1,120	1,420	2024	4/2	14	4,094	4,012	223	115	338	NB/EB	0.083	0.66	223	B	800	0.28
226	OC	KOA St	Rhododendron Ave	Marigold Ave	U	A1	Collector	480	770	830	830	2024	2/28	9	12,592	12,214	551	492	1,043	NB/EB	0.083	0.53	551	C	830	0.66
227	OC	KOA St	Marigold Ave	Doverplum Ave	U	A1	Collector	390	630	670	670	2024	2/28	9	16,891	16,384	590	588	1,178	NB/EB	0.070	0.50	590	C	670	0.88
416	OC	Lakeshore Blvd	Fortune Rd	Partin Settlement Rd	U	H	Collector	400	800	1,140	1,440	2024	3/26	13	15,430	15,121	493	675	1,168	SB/WB	0.076	0.58	675	C	1,140	0.59
417	OC	Lakeshore Blvd	Partin Settlement Rd	Brown Chapel Rd	U	H	Collector	400	800	1,140	1,440	2024	4/2	14	17,617	17,265	842	973	1,815	SB/WB	0.103	0.54	973	D	1,140	0.85
516	OC	Lakeshore Blvd	Brown Chapel Rd	Mississippi Ave	U	H	Collector	400	800	1,140	1,440	2024	4/2	14	12,206	11,962	572	520	1,092	NB/EB	0.089	0.52	572	C	1,140	0.50
2023	OC	Laurel Ave	KOA St	Marigold Ave	U	H	Collector	400	800	1,140	1,440	2024	3/28	13	2,118	2,076	66	118	184	SB/WB	0.087	0.64	118	B	1,140	0.10
225	OC	Marigold Ave	Cypress Pkwy	KOA St	U	A1	Collector	500	810	870	870	2024	4/2	14	13,719	13,445	478	554	1,032	SB/WB	0.075	0.54	554	C	870	0.64
230	OC	Marigold Ave	KOA St	Poinciana Pkwy	U	A1	Collector	460	740	790	790	2024	4/2	14	18,973	18,594	539	972	1,511	SB/WB	0.080	0.64	972	F	790	1.23
121	OC	Masters Blvd/Goodman Rd	Champions Gate Blvd	Bella Citta Blvd	U	A1	Collector	480	770	830	830	2024	2/27	9	14,549	14,113	733	570	1,303	NB/EB	0.090	0.56	733	C	830	0.88
9010	OC	McMichael Rd	Northern Terminus	Jack Brack Rd	RD	A	Local	0	420	550	590	2024	3/27	13	268	263	16	11	27	NB/EB	0.101	0.59	16	C	420	0.04
335	OC	Michigan Ave (CR 531)	US 192-441	Donegan Ave	U	A1	Minor Art	1,470	1,790	1,850	1,850	2024	3/6	10	31,101	30,168	1134	1199	2,333	SB/WB	0.075	0.51	1,199	B	1,850	0.65
334	OC	Michigan Ave (CR 531)	Donegan Ave	Carroll St	U	A1	Minor Art	1,470	1,790	1,850	1,850	2024	3/6	10	36,554	35,457	1262	1545	2,807	SB/WB	0.077	0.55	1,545	C	1,850	0.84
333	OC	Michigan Ave (CR 531)	Carroll St	Osceola Pkwy	U	A2	Minor Art	0	1,260	1,670	1,770	2024	3/6	10	34,009	32,989	1271	1223	2,494	NB/EB	0.073	0.51	1,271	D	1,670	0.76
556	OC	Michigan Ave (St Cloud)	Lakeshore Blvd	US 192-441	U	A1	Collector	270	430	460	460	2024	3/21	12	2,370	2,299	97	138	235	SB/WB	0.099	0.59	138	B	460	0.30
518	OC	Michigan Ave (St Cloud)	US 192	Nolte Rd	U	H	Collector	400	800	1,140	1,440	2024	3/21	12	6,569	6,372	227	360	587	SB/WB	0.089	0.61	360	B	1,140	0.32
534	OC	Michigan Ave (St Cloud)	Nolte Rd	Creek Woods Dr	U	H	Collector	400	800	1,140	1,440	2024	4/2	14	3,782	3,706	183	151	334	NB/EB	0.088	0.55	183	B	1,140	0.16
551	OC	Narcoossee Rd (CR 15)	Orange County Line	Jones Rd	U	A1	Principal Art	1,470	1,790	1,850	1,850	2024	4/2	14	39,305	38,519	1194	1719	2,913	SB/WB	0.074	0.59	1,719	C	1,850	0.93
539	OC	Narcoossee Rd (CR 15)	Jones Rd	Rummel Rd	U	H	Principal Art	1,770	2,560	3,320	3,760	2024	3/21	12	39,355	38,174	1439	1783	3,222	SB/WB	0.082	0.55	1,783	C	3,320	0.54
541	OC	Narcoossee Rd (CR 15)	Rummel Rd	10th St	U	A1	Principal Art	1,470	1,790	1,850	1,850	2024	3/21	12	35,767	34,694	1296	1509	2,805	SB/WB	0.078	0.54	1,509	C	1,850	0.82
589	OC	Narcoossee Rd (CR 15)	10th St	US 192-441	U	A1	Principal Art	1,470	1,790	1,850	1,850	2024	4/2	14	38,575	37,804	1495	1724	3,219	SB/WB	0.083	0.54	1,724	C	1,850	0.93
364	OC	Neptune Rd	Broadway Ave/Main St	Lakeshore Blvd	U	A1	Minor Art	1,400	1,700	1,760	1,760	2024	3/28	13	23,268	22,803	1121	698	1,819	NB/EB	0.078	0.62	1,121	B	1,760	0.64
363	OC	Neptune Rd	Lakeshore Blvd	Kings Hwy	U	A1	Minor Art	1,470	1,790	1,850	1,850	2024	4/10	15	33,650	33,314	1740	999	2,739	NB/EB	0.081	0.64	1,740	C	1,850	0.94
401	OC	Neptune Rd	Kings Hwy	Partin Settlement Rd	U	A1	Minor Art	1,400	1,700	1,760	1,760	2024	3/26	13	31,511	30,881	1407	1070	2,477	NB/EB	0.079	0.57	1,407	C	1,760	0.80
501	OC	Neptune Rd	Partin Settlement Rd	Old Canoe Creek Rd	U	A1	Minor Art	480	770	830	830	2024	4/3	14	23,030	22,569	905	643	1,548	NB/EB	0.067	0.58	905	F	830	1.09
502	OC	Neptune Rd	Old Canoe Creek Rd	US 192-441	U	A2	Minor Art	0	530	770	810	2024	3/21	12	11,873	11,517	475	440	915	NB/EB	0.077	0.52	475	C	770	0.62
530	OC	Nolte Rd	Old Canoe Creek Rd	Canoe Creek Road (CR 523)	U	A1	Collector	1,470	1,790	1,850	1,850	2024	3/20	12	19,502	18,917	982	597	1,579	NB/EB	0.081	0.62	982	B	1,850	0.53
NA3	OC	Nolte Rd	Canoe Creek Road (CR 523)	Michigan Ave	U	A1	Collector	1,470	1,790	1,850	1,850	2024	3/20	12	20,291	19,682	824	722	1,546	NB/EB	0.076	0.53	824	B	1,850	0.45
NA4	OC	Nolte Rd	Michigan Ave	Hickory Tree Rd	U	A1	Collector	1,470	1,790	1,850	1,850	2024	3/20	12	18,495	17,940	759	701	1,460	NB/EB	0.079	0.52	759	B	1,850	0.41
9011	OC	Nova Rd (CR 532)	US 192	Lake Lizzie Dr	U	H	Collector	400	800	1,140	1,440	2024	3/20	12	9,731	9,439	423	368	791	NB/EB	0.081	0.53	423	C	1,140	0.37
542	OC	Nova Rd (CR 532)	Lake Lizzie Dr	Eden Dr	U	H	Collector	400	800	1,140	1,440	2024	3/27	13	5,786	5,670	205	299	504	SB/WB	0.087	0.59	299	B	1,140	0.26
1003	OC	Nova Rd (CR 532)	Eden Dr	Orange County Line	RU	H	Collector	240	430	740	1,480	2024	3/28	13	3,829	3,752	133	249	382	SB/WB	0.100	0.65	249	C	430	0.58
471	OC	Old Boggy Creek Rd	Denn John Ln	Fortune Rd	U	A1	Collector	480	770	830	830	2024	3/6	10	8,899	8,632	509	298	807	NB/EB	0.091	0.63	509	C	830	0.61
503	OC	Old Canoe Creek Rd	US 192-441	Neptune Rd	U	A1	Minor Art	1,470	1,790	1,850	1,850	2024	3/21	12	21,135	20,501	826	853	1,679	SB/WB	0.079	0.51	853	B	1,850	0.46
504	OC	Old Canoe Creek Rd	Neptune Rd	Kissimmee Park Rd	U	A2	Minor Art	0	1,260	1,670	1,770	2024	3/20	12	28,855	27,989	1039	1215	2,254	SB/WB	0.078	0.54	1,215	C	1,670	0.73
506	OC	Old Canoe Creek Rd	Kissimmee Park Rd	Canoe Creek Road (CR 523)	U	A1	Minor Art	480	770	830	830	2024	3/20	12	22,627	21,948	712	1138	1,850	SB/WB	0.082	0.62	1,138	F	830	1.37
357	OC	Old Dixie Hwy	Donegan Ave	Osceola Pkwy	U	A1	Collector	480	770	830	830	2024	3/6	10	9,252	8,974	394	463	857	SB/WB	0.093	0.54	463	B	830	0.56
529	OC	Old Hickory Tree Rd	Nolte Rd	US 192-441	U	A1	Collector	480	770	830	830	2024	3/21	12	7,660	7,430	283	477	760	SB/WB	0.099	0.63	477	B	830	0.57
103	OC	Old Lake Wilson Rd (CR 545)	Osceola Polk Line Rd (CR 532)	Sinclair Rd	U	A1	Minor Art	480	770	830	830	2024	4/2	14	24,255	23,770	612	986	1,598	SB/WB	0.066	0.62	986	F	830	1.19
105	OC	Old Lake Wilson Rd (CR 545)	Sinclair Rd	Westgate Blvd	U	A1	Minor Art	1,470	1,790	1,850	1,850	2024	2/27	9	19,236	18,659	516	1081	1,597	SB/WB	0.083	0.68	1,081	B	1,850	0.58
111	OC	Old Lake Wilson Rd (CR 545)	Westgate Blvd	US 192	U	A1	Minor Art	2,270	2,700	2,780	2,780	2024	4/2	14	34,761	34,066	954	1329	2,283	SB/WB	0.066	0.58	1,329	B	2,780	0.48
601	OC	Old Melbourne Hwy	US 192	Bronco Dr	T	H	Collector	420	800	1,120	1,420	2024	3/20	12	4,013	3,893	177	148	325	NB/EB	0.081	0.54	177	B	800	0.22
208	OC	Old Tampa Hwy	US 17/92	Poinciana Blvd	U	H	Collector	400	800	1,140	1,440	2024	2/21	8	8,569	8,398	281	579	860	SB/WB	0.100	0.67	579	C	1,140	0.51
233	OC	Old Tampa Hwy	Poinciana Blvd	Broad St	U	H	Collector	400	800	1,140	1,440	2024	3/28	13	14,195	13,911	666	519	1,185	NB/EB	0.083	0.56	666	C	1,140	0.58
207	OC	Old Tampa Hwy	Broad St	Jack Calhoun Dr	U	H	Collector	400	800	1,140	1,440	2024	2/21	8	10,884	10,666	288	654	942	SB/WB	0.087	0.69	654	C	1,140	0.57
176	OC	Old Vineland Rd	US 192	Princess Way	U	A1	Collector	480	770	830	830	2024	3/7	10	5,580	5,413	251	248	499	NB/EB	0.089	0.50	251	B	830	0.30
324	OC	Orange Ave (CR 527)	Osceola Pkwy	Orange County Line	U	A1	Minor Art	1,400	1,700	1,760	1,760	2024	3/6	10	27,759	26,926	861	1190	2,051	SB/WB	0.074	0.58	1,190	B	1,760	0.68
538	OC	Orange Ave (St Cloud)	US 192-441 (13th St)	Rummell Rd	U	A1	Collector	270	430	460	460	2024	3/21	12	2,161	2,096	106	93	199	NB/EB	0.092	0.53	106	B	460	0.23
178	OC	Oren Brown Rd	Poinciana Blvd	US 192	U	A1	Collector	480	770	830	830	2024	4/2	14	13,735	13,460	342	543	885	SB/WB	0.064	0.61	543	C	830	0.65
181	OC	Osceola Pkwy	I-4	SR 417	U	A2	Principal Art	0	1,260	1,670	1,770	2024	2/27	9	25,979	25,200	1481	952	2,433	NB/EB	0.094	0.61	1,481	D	1,670	0.89

APPENDIX C

Intersection Counts, FDOT Seasonal Factors &
Signal Timings

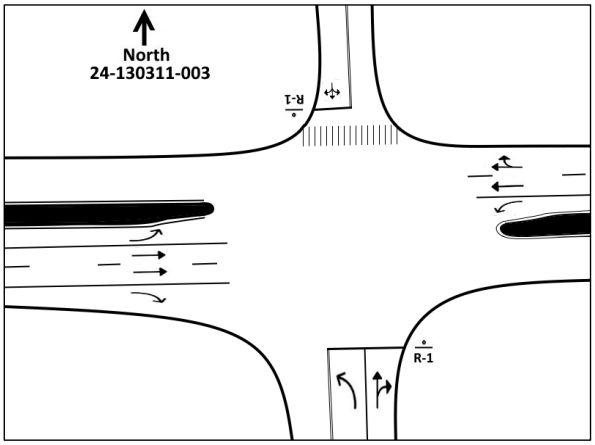
LOCATION: Old Hickory Tree Rd/Clark Rd & Nolte Rd
CITY/STATE: St. Cloud, FL

PROJECT ID: 24-130311-003
DATE: Thu, Sep 12, 2024

Peak-Hour: 05:00 PM - 06:00 PM
Peak 15-Minute: 05:15 PM - 05:30 PM

Peak Hour Factor
0.92

National Data & Surveying Services



15-Min Count Period Beginning At	Old Hickory Tree Rd/Clark Rd Northbound					Old Hickory Tree Rd/Clark Rd Southbound					Nolte Rd Eastbound					Nolte Rd Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
4:00 PM	17	0	0	0		0	0	1	0		0	145	30	0		5	117	0	0		315	1158
4:15 PM	16	0	4	0		0	0	0	0		0	132	20	0		3	119	0	3		297	1119
4:30 PM	14	0	3	0		0	0	0	0		0	107	25	0		9	96	0	0		254	1155
4:45 PM	15	0	7	0		0	0	1	0		0	124	26	0		4	113	0	2		292	1229
5:00 PM	21	0	3	0		0	1	0	0		0	110	17	0		9	114	0	1		276	1231
5:15 PM	30	0	1	0		1	0	0	0		0	119	27	0		11	143	1	0		333	955
5:30 PM	27	0	2	0		1	0	0	0		0	129	20	0		5	140	2	2		328	622
5:45 PM	18	0	4	0		1	0	0	0		1	100	22	0		5	141	1	1		294	294
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	120	0	16	0		4	4	0	0		4	516	108	0		44	572	8	8		**1404**	
Heavy Trucks	4	0	0	0		0	0	0	0		0	8	0	0		0	24	0	0		**36**	
Pedestrians		0					4					0					0				**4**	
Bicycles	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		**0**	
Buses																						
Stopped Buses																						

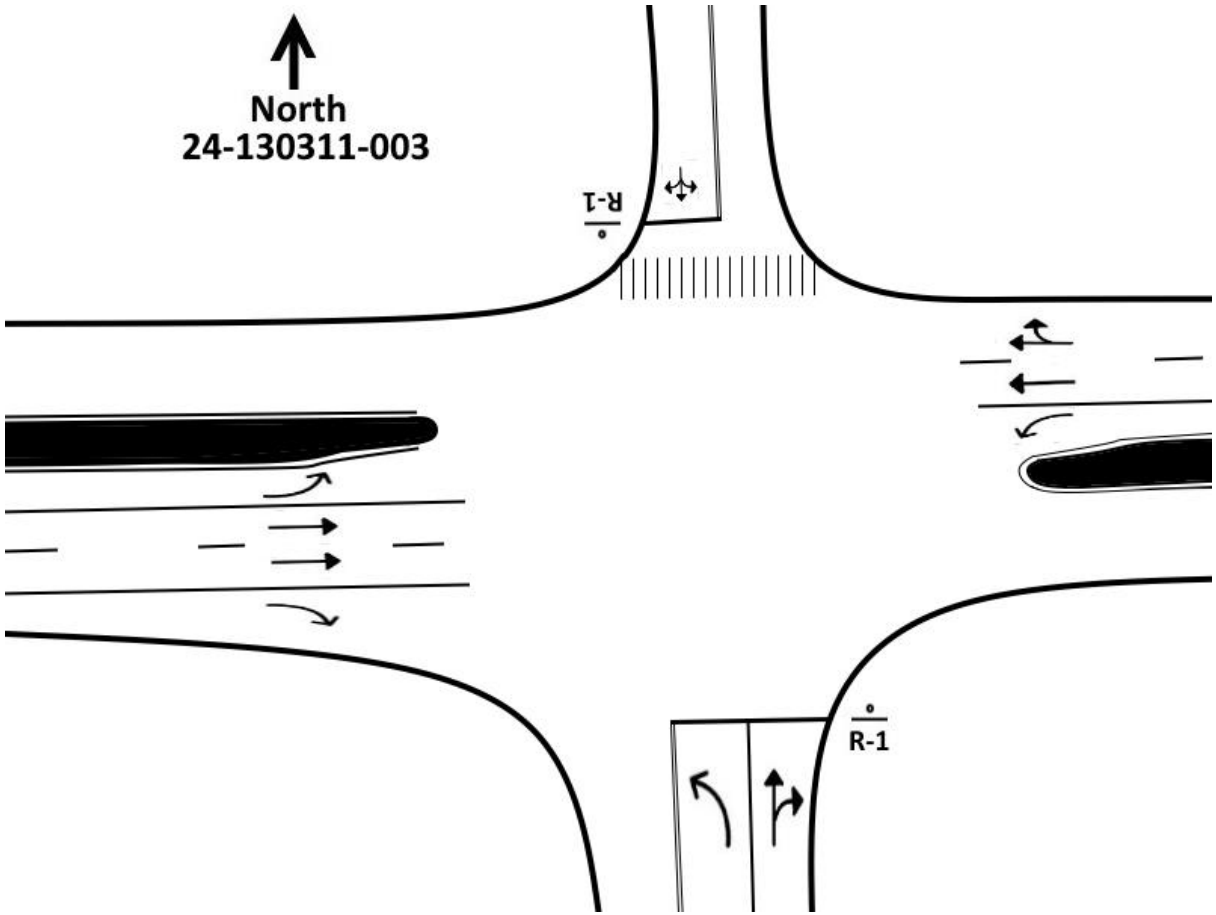
National Data & Surveying Services

Site Code:	**24-130311-003**
Date:	**09/12/2024**
Weather:	**Sunny**
City:	**St. Cloud**
County:	**Osceola**
Count Times:	**16:00 - 18:00**
Control:	**2-Way Stop(NB/SB)**

N

N/S Street: **Old Hickory Tree Rd/Clark Rd**

Speed: **45/30 MPH**



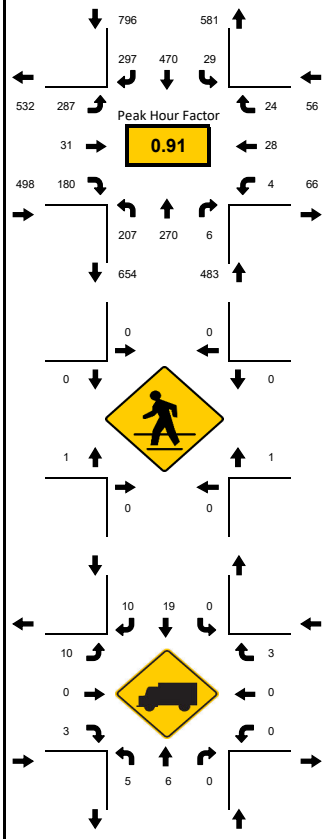
E/W Street: **Nolte Rd**

Speed: **45 MPH**

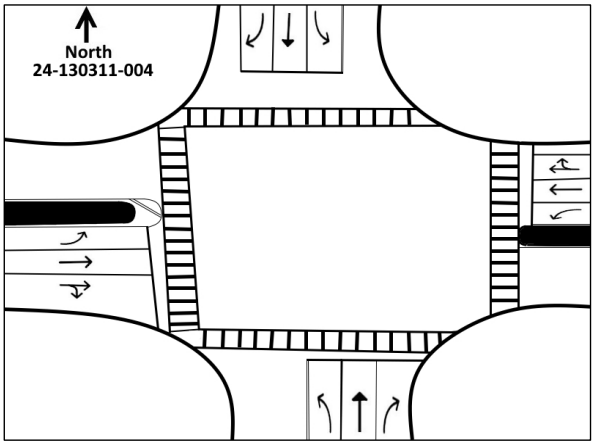
LOCATION: Hickory Tree Rd & E Nolte Rd
CITY/STATE: St. Cloud, FL

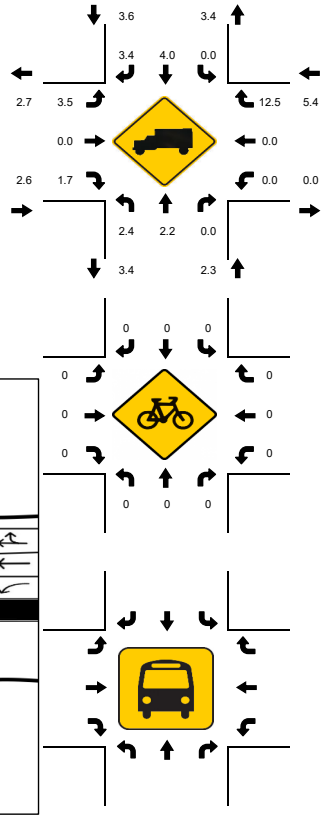
PROJECT ID: 24-130311-004
DATE: Thu, Sep 12, 2024

Peak-Hour: 04:45 PM - 05:45 PM
Peak 15-Minute: 05:15 PM - 05:30 PM



National Data & Surveying Services





15-Min Count Period Beginning At	Hickory Tree Rd Northbound					Hickory Tree Rd Southbound					E Nolte Rd Eastbound					E Nolte Rd Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
4:00 PM	33	65	0	0		11	87	73	0		80	13	41	4		1	12	10	0		430	1681
4:15 PM	34	60	2	0		7	73	76	0		82	10	43	4		0	11	5	0		407	1665
4:30 PM	32	58	2	0		10	112	62	0		65	10	39	4		1	5	4	0		404	1761
4:45 PM	41	75	2	0		10	104	71	0		77	3	40	3		1	6	7	0		440	1833
5:00 PM	44	62	2	0		5	104	68	0		57	9	43	6		1	8	5	0		414	1828
5:15 PM	63	72	1	0		4	144	74	0		71	10	43	4		0	10	7	0		503	1414
5:30 PM	59	61	1	0		10	118	84	0		67	9	54	2		2	4	5	0		476	911
5:45 PM	51	50	1	0		7	108	93	0		71	3	39	3		0	8	1	0		435	435
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	252	300	8	0		40	576	336	0		308	40	216	24		8	40	28	0		**2176**	
Heavy Trucks	12	12	0	0		0	24	12	0		20	0	8	0		0	0	8	0		**96**	
Pedestrians		0					0					4					4				**8**	
Bicycles	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		**0**	
Buses																						
Stopped Buses																						

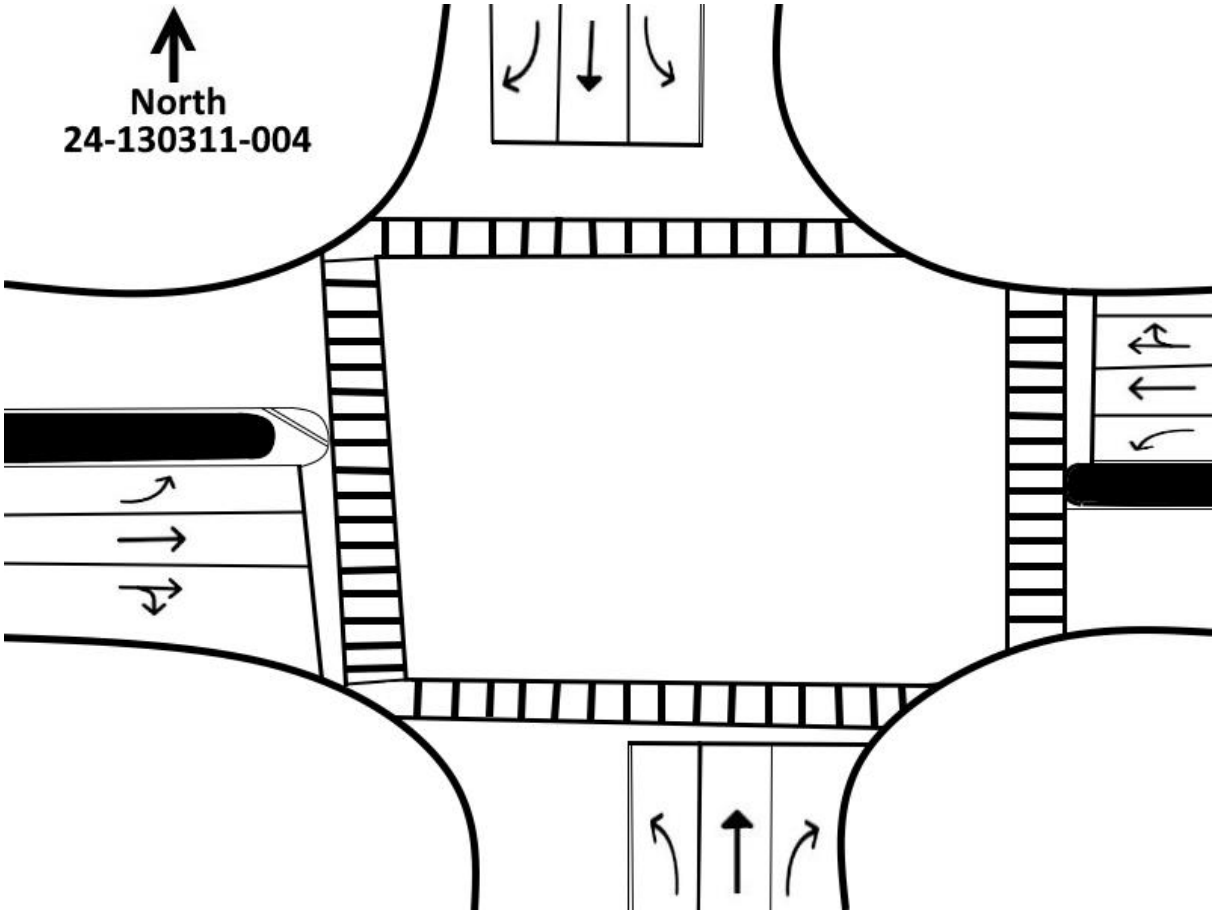
National Data & Surveying Services

Site Code:	**24-130311-004**
Date:	**09/12/2024**
Weather:	**Sunny**
City:	**St. Cloud**
County:	**Osceola**
Count Times:	**16:00 - 18:00**
Control:	**Signalized**

N

N/S Street: **Hickory Tree Rd**

Speed: **45 MPH**



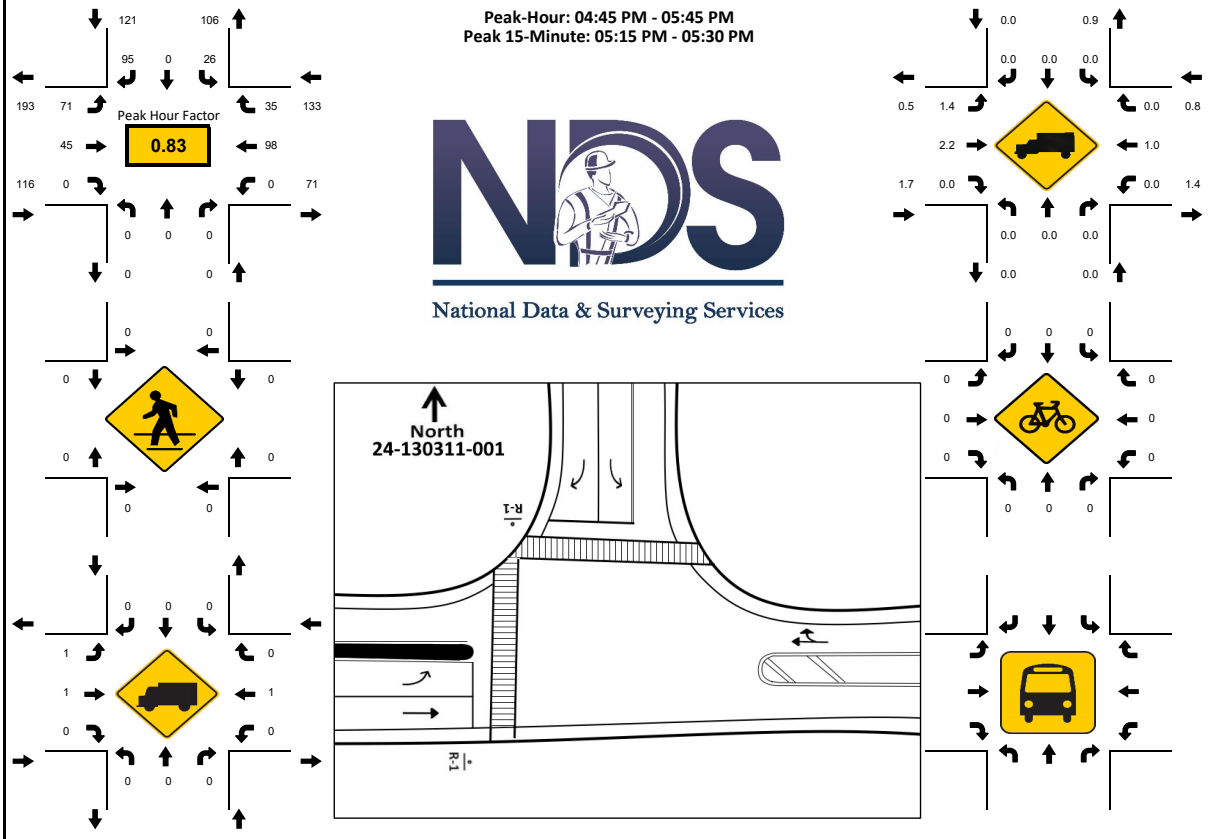
E/W Street: **E Nolte Rd**

Speed: **25/45 MPH**

LOCATION: Old Hickory Tree Rd & CR 534/Gramercy Farms Blvd/Old Hickory Tree Rd
CITY/STATE: St. Cloud, FL

PROJECT ID: 24-130311-001
DATE: Thu, Sep 12, 2024

Peak-Hour: 04:45 PM - 05:45 PM
Peak 15-Minute: 05:15 PM - 05:30 PM



National Data & Surveying Services

15-Min Count Period Beginning At	Old Hickory Tree Rd Northbound					Old Hickory Tree Rd Southbound					ramercy Farms Blvd/Old Hickory Eastbound					ramercy Farms Blvd/Old Hickory Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
4:00 PM	0	0	0	0		12	0	21	0		11	16	0	0		0	10	8	0		78	316
4:15 PM	0	0	0	0		6	0	18	0		13	8	0	0		0	15	7	0		67	314
4:30 PM	0	0	0	0		9	0	24	0		12	10	0	0		0	26	2	0		83	358
4:45 PM	0	0	0	0		7	0	22	0		15	8	0	0		0	31	5	0		88	370
5:00 PM	0	0	0	0		3	0	24	0		17	9	0	0		0	15	8	0		76	348
5:15 PM	0	0	0	0		11	0	27	0		19	14	0	0		0	26	14	0		111	272
5:30 PM	0	0	0	0		5	0	22	0		20	14	0	0		0	26	8	0		95	161
5:45 PM	0	0	0	0		6	0	17	0		14	9	0	0		0	12	8	0		66	66
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	0	0	0	0		44	0	108	0		80	56	0	0		0	124	56	0		**468**	
Heavy Trucks	0	0	0	0		0	0	0	0		4	4	0	0		0	4	0	0		**12**	
Pedestrians		0					0					0					0				**0**	
Bicycles	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		**0**	
Buses																						
Stopped Buses																						

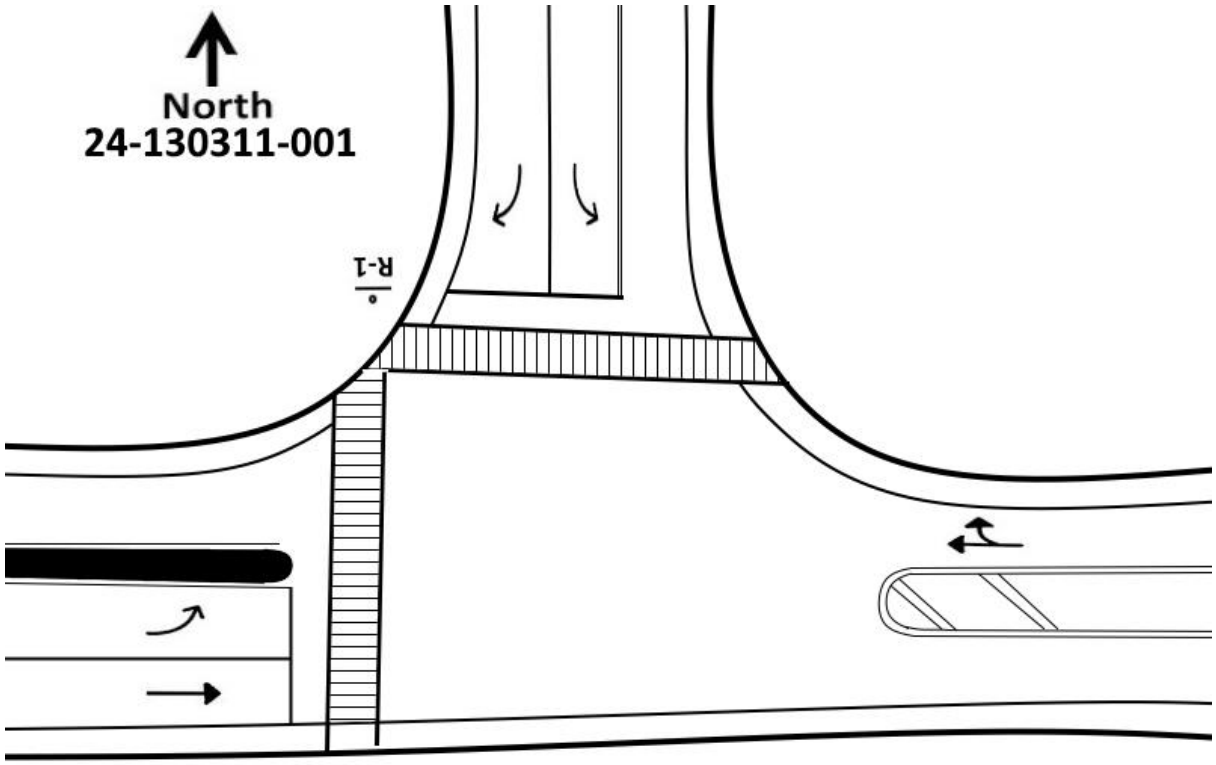
National Data & Surveying Services

Site Code:	**24-130311-001**
Date:	**09/12/2024**
Weather:	**Sunny**
City:	**St. Cloud**
County:	**Osceola**
Count Times:	**16:00 - 18:00**
Control:	**2-Way Stop(SB/EB)**

N

N/S Street: **Old Hickory Tree Rd**

Speed: **45 MPH**



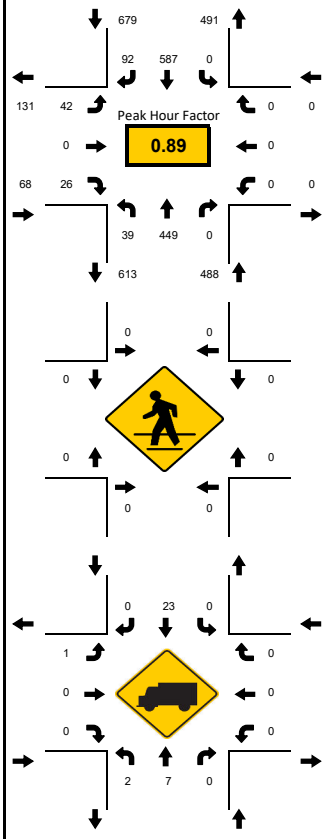
E/W Street: **CR 534/Gramercy Farms Blvd/Old Hickory Tree Rd**

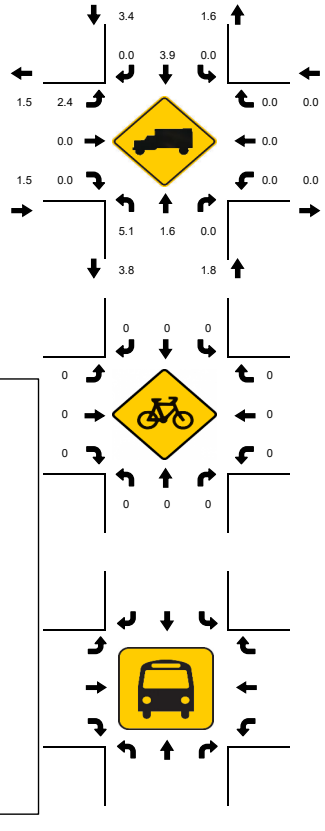
Speed: **30/45 MPH**

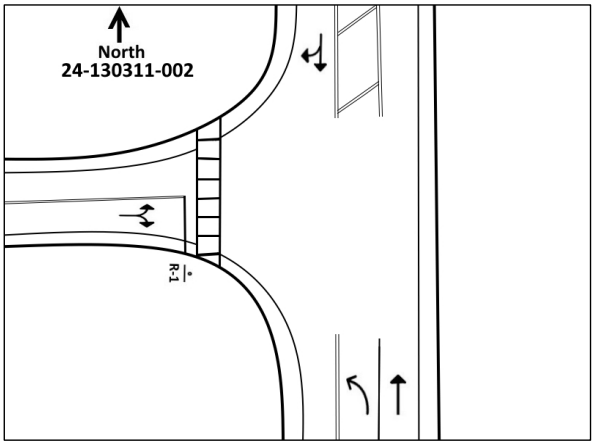
LOCATION: Hickory Tree Rd & CR 534/Old Hickory Tree Rd
CITY/STATE: St. Cloud, FL

PROJECT ID: 24-130311-002
DATE: Thu, Sep 12, 2024

Peak-Hour: 04:45 PM - 05:45 PM
Peak 15-Minute: 05:15 PM - 05:30 PM







15-Min Count Period Beginning At	Hickory Tree Rd Northbound					Hickory Tree Rd Southbound					CR 534/Old Hickory Tree Rd Eastbound					CR 534/Old Hickory Tree Rd Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
4:00 PM	3	81	0	0		0	121	15	0		16	0	7	0		0	0	0	0		243	1001
4:15 PM	9	89	0	0		0	105	9	0		3	0	6	0		0	0	0	0		221	1038
4:30 PM	6	89	0	0		0	120	25	0		11	0	1	0		0	0	0	0		252	1162
4:45 PM	7	107	0	0		0	131	25	0		7	0	8	0		0	0	0	0		285	1235
5:00 PM	8	110	0	0		0	131	17	0		10	0	4	0		0	0	0	0		280	1195
5:15 PM	11	126	0	0		0	164	25	0		11	0	8	0		0	0	0	0		345	915
5:30 PM	13	106	0	0		0	161	25	0		14	0	6	0		0	0	0	0		325	570
5:45 PM	2	93	0	0		0	126	15	0		7	0	2	0		0	0	0	0		245	245
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	52	504	0	0		0	656	100	0		56	0	32	0		0	0	0	0		**1400**	
Heavy Trucks	4	12	0	0		0	32	0	0		4	0	0	0		0	0	0	0		**52**	
Pedestrians		0					0					0					0				**0**	
Bicycles	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		**0**	
Buses																						
Stopped Buses																						

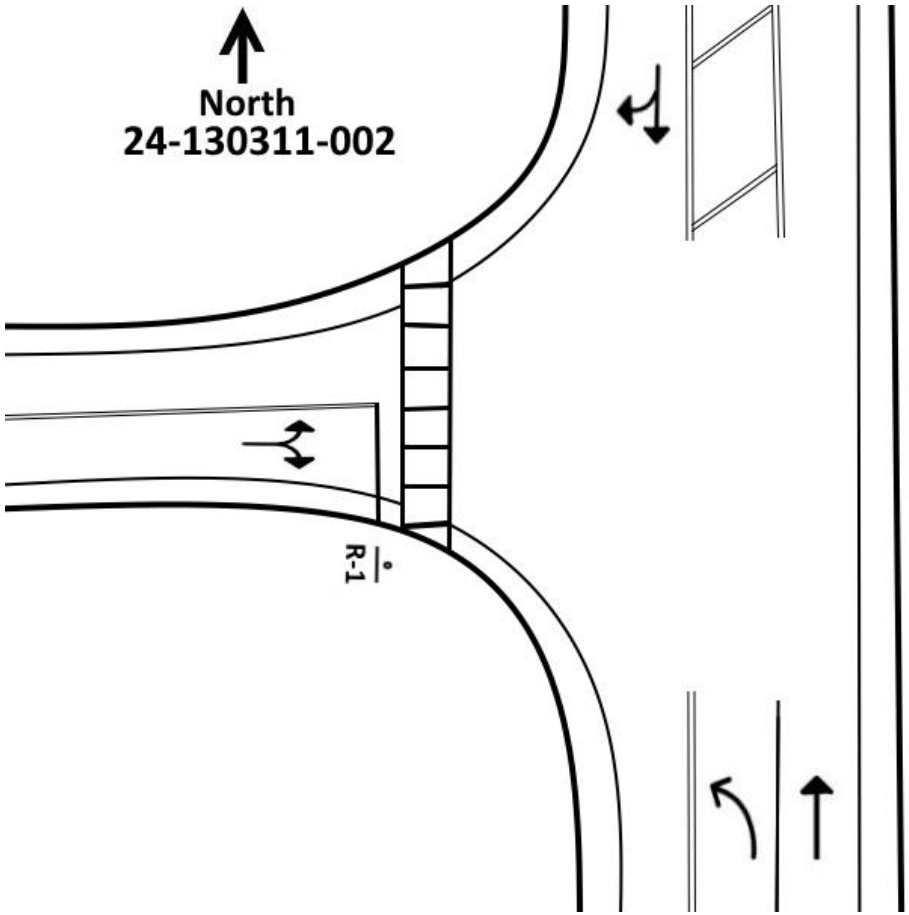
National Data & Surveying Services

Site Code:	**24-130311-002**
Date:	**09/12/2024**
Weather:	**Sunny**
City:	**St. Cloud**
County:	**Osceola**
Count Times:	**16:00 - 18:00**
Control:	**1-Way Stop(EB)**

N

N/S Street: **Hickory Tree Rd**

Speed: **45 MPH**



E/W Street: **CR 534/Old Hickory Tree Rd**

Speed: **45 MPH**

Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Hawk Flash															
Yellow	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Red Delay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Plan 1 - ""Continued

Phase Recall (MM) 2-1-6

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector									X	X	X	X	X	X	X	X
Vehicle Recall		X				X										
Ped Recall																
Max Recall																
Soft Recall																
No Rest																

Overlap (MM) 2-1-7

Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	Leading															
Adv. Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adv. Ped	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay FYA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Trailing															
Lag Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phase Outputs (MM) 2-1-8

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Double Serve															
Dbl Serv Ph.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Plan 2 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
2-1-1	Minimum Green															
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Variable Initial															
Lane	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-1-2	Vehicle Passage															
Vehicle Ext	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Volume Occupancy															
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-3	Max Green Data															
Max1	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35

2023 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 9200 OSCEOLA COUNTYWIDE

MOCF: 0.98

WEEK	DATES	SF	PSCF
1	01/01/2023 - 01/07/2023	1.02	1.04
2	01/08/2023 - 01/14/2023	1.02	1.04
3	01/15/2023 - 01/21/2023	1.02	1.04
4	01/22/2023 - 01/28/2023	1.01	1.03
5	01/29/2023 - 02/04/2023	1.00	1.02
6	02/05/2023 - 02/11/2023	0.99	1.01
* 7	02/12/2023 - 02/18/2023	0.98	1.00
* 8	02/19/2023 - 02/25/2023	0.98	1.00
* 9	02/26/2023 - 03/04/2023	0.97	0.99
*10	03/05/2023 - 03/11/2023	0.97	0.99
*11	03/12/2023 - 03/18/2023	0.96	0.98
*12	03/19/2023 - 03/25/2023	0.97	0.99
*13	03/26/2023 - 04/01/2023	0.98	1.00
*14	04/02/2023 - 04/08/2023	0.98	1.00
*15	04/09/2023 - 04/15/2023	0.99	1.01
*16	04/16/2023 - 04/22/2023	0.99	1.01
*17	04/23/2023 - 04/29/2023	0.99	1.01
*18	04/30/2023 - 05/06/2023	0.99	1.01
*19	05/07/2023 - 05/13/2023	0.99	1.01
20	05/14/2023 - 05/20/2023	0.99	1.01
21	05/21/2023 - 05/27/2023	1.00	1.02
22	05/28/2023 - 06/03/2023	1.00	1.02
23	06/04/2023 - 06/10/2023	1.01	1.03
24	06/11/2023 - 06/17/2023	1.01	1.03
25	06/18/2023 - 06/24/2023	1.01	1.03
26	06/25/2023 - 07/01/2023	1.01	1.03
27	07/02/2023 - 07/08/2023	1.01	1.03
28	07/09/2023 - 07/15/2023	1.01	1.03
29	07/16/2023 - 07/22/2023	1.01	1.03
30	07/23/2023 - 07/29/2023	1.02	1.04
31	07/30/2023 - 08/05/2023	1.02	1.04
32	08/06/2023 - 08/12/2023	1.02	1.04
33	08/13/2023 - 08/19/2023	1.03	1.05
34	08/20/2023 - 08/26/2023	1.03	1.05
35	08/27/2023 - 09/02/2023	1.03	1.05
36	09/03/2023 - 09/09/2023	1.02	1.04
37	09/10/2023 - 09/16/2023	1.02	1.04
38	09/17/2023 - 09/23/2023	1.02	1.04
39	09/24/2023 - 09/30/2023	1.02	1.04
40	10/01/2023 - 10/07/2023	1.01	1.03
41	10/08/2023 - 10/14/2023	1.01	1.03
42	10/15/2023 - 10/21/2023	1.00	1.02
43	10/22/2023 - 10/28/2023	1.00	1.02
44	10/29/2023 - 11/04/2023	1.00	1.02
45	11/05/2023 - 11/11/2023	1.00	1.02
46	11/12/2023 - 11/18/2023	1.00	1.02
47	11/19/2023 - 11/25/2023	1.01	1.03
48	11/26/2023 - 12/02/2023	1.01	1.03
49	12/03/2023 - 12/09/2023	1.01	1.03
50	12/10/2023 - 12/16/2023	1.02	1.04
51	12/17/2023 - 12/23/2023	1.02	1.04
52	12/24/2023 - 12/30/2023	1.02	1.04
53	12/31/2023 - 12/31/2023	1.02	1.04

* PEAK SEASON

09-MAR-2024 18:41:41 830UPD 5_9200_PKSEASON.TXT

APPENDIX D

Existing Capacity Analysis Worksheets

HCS Two-Way Stop-Control Report

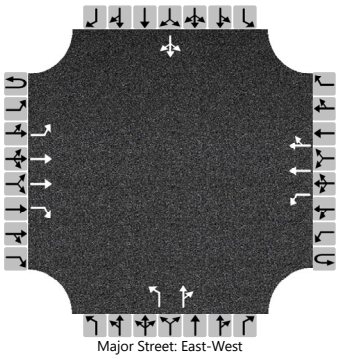
General Information

Analyst	YS
Agency/Co.	TPD, Inc.
Date Performed	9/23/2024
Analysis Year	2024
Time Analyzed	Existing P.M.
Intersection Orientation	East-West
Project Description	5981

Site Information

Intersection	Old Hickory Tree Rd/Clark Rd & Nolte Rd
Jurisdiction	Osceola
East/West Street	Nolte Rd
North/South Street	Old Hickory Tree Rd/Clark Rd
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	1	0	1	2	0		1	1	0		0	1	0
Configuration		L	T	R		L	T	TR		L		TR			LTR	
Volume (veh/h)	0	1	467	88	4	31	549	4		98	0	10		3	1	0
Percent Heavy Vehicles (%)	0	0			0	0				1	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized		No														
Median Type | Storage		Left + Thru								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1			6.4	4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.10			6.40	4.10				7.52	6.50	6.90		7.50	6.50	6.90
Base Follow-Up Headway (sec)		2.2			2.5	2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20			2.50	2.20				3.51	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1				38				107		11			4	
Capacity, c (veh/h)		986				937				356		752			297	
v/c Ratio		0.00				0.04				0.30		0.01			0.01	
95% Queue Length, Q_{95} (veh)		0.0				0.1				1.2		0.0			0.0	
95% Queue Length, Q_{95} (ft)		0.0				2.5				30.2		0.0			0.0	
Control Delay (s/veh)		8.7				9.0				19.4		9.9			17.3	
Level of Service (LOS)		A				A				C		A			C	
Approach Delay (s/veh)		0.0				0.5				18.5				17.3		
Approach LOS		A				A				C				C		

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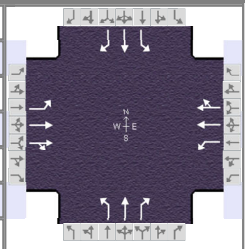
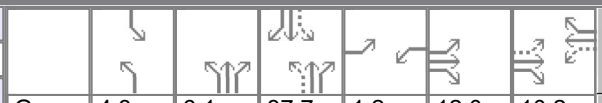
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	TPD, Inc.			Duration, h	0.250
Analyst	YS	Analysis Date	Sep 27, 2024	Area Type	Other
Jurisdiction	St Cloud	Time Period	P.M. Peak Hour	PHF	0.91
Urban Street	Hickory Tree Rd	Analysis Year	2024	Analysis Period	1> 16:45
Intersection	E Nolte Rd	File Name	5981 - Hickory Tree Rd & E Nolte Rd - Existing.xus		
Project Description	Existing P.M.				

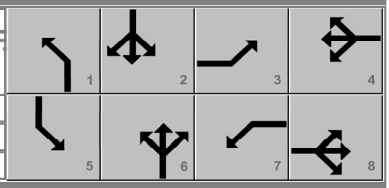


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	292	32	184	4	29	24	211	275	6	30	479	303

Signal Information			
Cycle, s	105.5	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.3	6.1	37.7	1.2	12.0	10.2
Yellow	4.8	0.0	4.8	3.4	4.8	3.4
Red	2.2	0.0	2.2	3.2	2.0	3.2



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	3	8	7	4	1	6	5	2
Case Number	1.1	4.0	1.1	4.0	1.1	3.0	1.1	3.0
Phase Duration, s	26.6	35.6	7.8	16.8	17.4	50.7	11.3	44.7
Change Period, ($Y+R_c$), s	6.8	6.8	6.6	6.8	6.8	7.0	7.0	7.0
Max Allow Headway (*MAH*), s	4.5	3.2	3.3	3.2	3.5	5.5	3.5	5.5
Queue Clearance Time (g_s), s	18.5	13.0	2.2	3.7	10.4	13.9	3.2	29.2
Green Extension Time (g_e), s	1.3	0.5	0.0	0.6	0.2	10.3	0.0	8.5
Phase Call Probability	1.00	1.00	0.12	1.00	1.00	1.00	0.62	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.41	0.09	0.00	0.30

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h	321	35	202	4	29	29	232	302	7	33	526	333
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1753	1900	1610	1810	1900	1631	1781	1870	1610	1810	1841	1572
Queue Service Time (g_s), s	16.5	1.4	11.0	0.2	1.5	1.7	8.4	11.9	0.3	1.2	27.2	18.2
Cycle Queue Clearance Time (g_c), s	16.5	1.4	11.0	0.2	1.5	1.7	8.4	11.9	0.3	1.2	27.2	18.2
Green Ratio (*g/C*)	0.30	0.27	0.27	0.11	0.09	0.09	0.47	0.41	0.41	0.40	0.36	0.36
Capacity (*c*), veh/h	501	519	439	199	180	155	335	776	668	453	657	562
Volume-to-Capacity Ratio (*X*)	0.640	0.068	0.460	0.022	0.163	0.187	0.692	0.390	0.010	0.073	0.801	0.593
Back of Queue (*Q*), ft/ln (95 th percentile)	288	29	189	5	32	35	160	219	4	22	467	283
Back of Queue (*Q*), veh/ln (95 th percentile)	11.2	1.1	7.4	0.2	1.3	1.3	6.3	8.6	0.2	0.9	18.1	11.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	31.6	28.4	31.9	42.2	43.9	44.0	22.3	21.6	18.1	19.7	30.5	27.7
Incremental Delay (d_2), s/veh	1.6	0.0	0.3	0.0	0.2	0.2	3.2	0.3	0.0	0.0	5.9	2.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	33.2	28.4	32.2	42.3	44.1	44.2	25.5	21.9	18.2	19.8	36.4	29.8
Level of Service (LOS)	C	C	C	D	D	D	C	C	B	B	D	C
Approach Delay, s/veh / LOS	32.6	C		44.0	D		23.4	C		33.3	C	
Intersection Delay, s/veh / LOS	30.8						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.12	B	2.14	B	2.27	B	2.28	B
Bicycle LOS Score / LOS	0.95	A	0.54	A	1.38	A	1.96	B

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HCS Two-Way Stop-Control Report

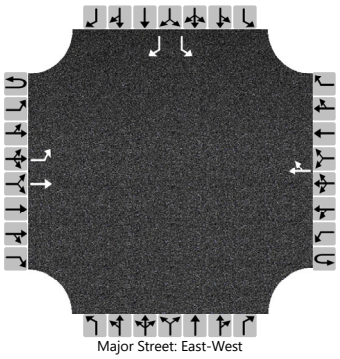
General Information

Analyst	YS
Agency/Co.	TPD, Inc.
Date Performed	9/23/2024
Analysis Year	2024
Time Analyzed	Existing P.M.
Intersection Orientation	East-West
Project Description	5981

Site Information

Intersection	Old Hickory Tree Rd &Gramercy Farms Blvd/...
Jurisdiction	Osceola
East/West Street	CR 534/Gramercy Farms Blvd/Old Hickory Tr...
North/South Street	Old Hickory Tree Rd
Peak Hour Factor	0.83
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		1	0	1
Configuration		L	T					TR						L		R
Volume (veh/h)		72	46				100	36						27		97
Percent Heavy Vehicles (%)		1												0		0
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized														No		
Median Type | Storage		Left + Thru								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.11												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.21												3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		87												33		117
Capacity, c (veh/h)		1421												641		911
v/c Ratio		0.06												0.05		0.13
95% Queue Length, Q_{95} (veh)		0.2												0.2		0.4
95% Queue Length, Q_{95} (ft)		5.0												5.0		10.0
Control Delay (s/veh)		7.7												10.9		9.5
Level of Service (LOS)		A												B		A
Approach Delay (s/veh)		4.7												9.8		
Approach LOS		A												A		

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HCS Two-Way Stop-Control Report

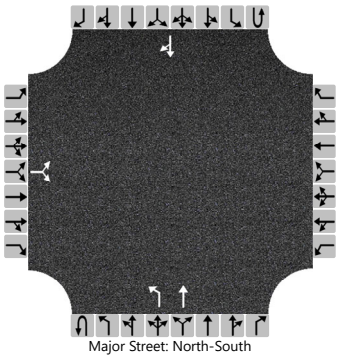
General Information

Analyst	YS
Agency/Co.	TPD, Inc.
Date Performed	9/23/2024
Analysis Year	2024
Time Analyzed	Existing P.M.
Intersection Orientation	North-South
Project Description	5981

Site Information

Intersection	Hickory Tree Rd & CR 534/Old Hickory Tree Rd
Jurisdiction	Osceola
East/West Street	CR 534/Old Hickory Tree Rd
North/South Street	Hickory Tree Rd
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	1	0	0	0	1	0
Configuration			LR							L	T					TR
Volume (veh/h)		43		27						40	458				599	94
Percent Heavy Vehicles (%)		2		0						5						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.42		6.20						4.15						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.52		3.30						2.25						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			79							45						
Capacity, c (veh/h)			212							825						
v/c Ratio			0.37							0.05						
95% Queue Length, Q_{95} (veh)			1.6							0.2						
95% Queue Length, Q_{95} (ft)			40.4							5.2						
Control Delay (s/veh)			31.6							9.6						
Level of Service (LOS)			D							A						
Approach Delay (s/veh)		31.6								0.8						
Approach LOS		D								A						

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APPENDIX E

Planned and Programmed Improvements

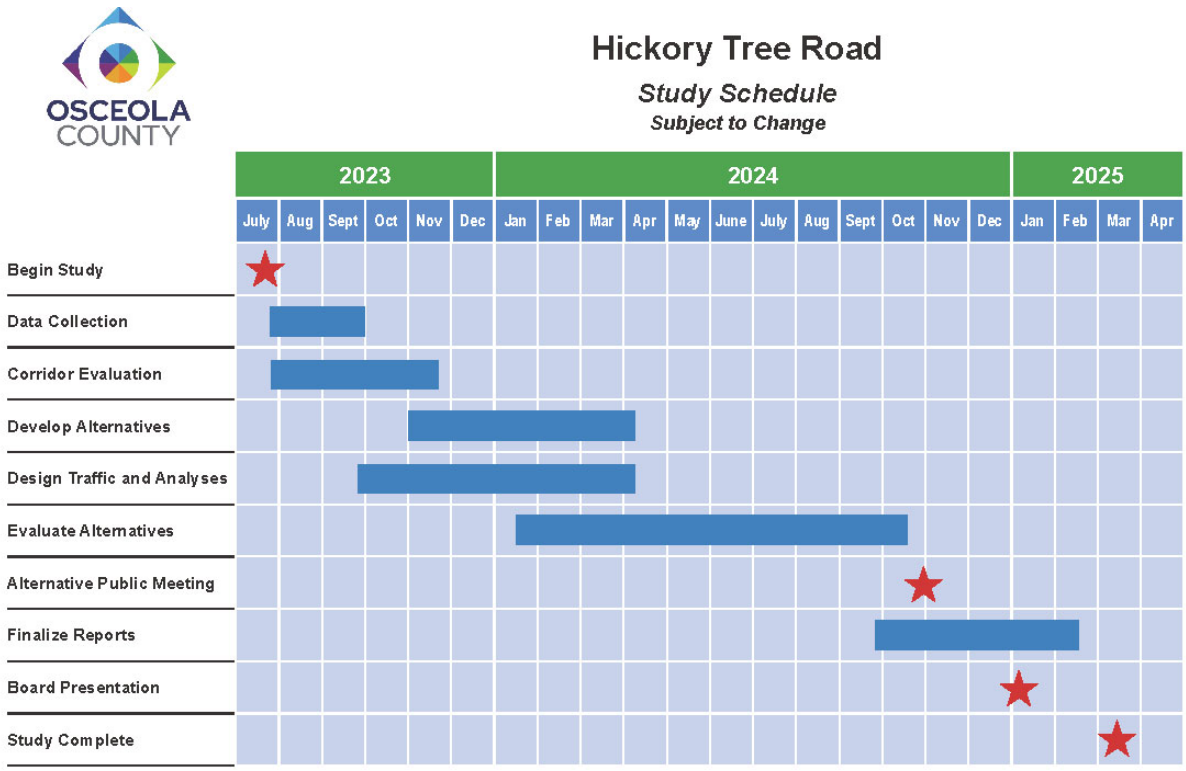


Osceola County is conducting a Project Development and Environment (PD&E) Study for Hickory Tree Road, approximately 11 miles from US 192 (south) to US 192 (north). This study will evaluate widening the existing two-lane roadway to a four-lane divided urban roadway. In addition, multi-modal transportation improvements including continuous sidewalk and buffered bicycle lanes will be evaluated.

The PD&E Study will involve a wide range of engineering assessments, environmental analysis and public involvement to identify and evaluate alternatives that meet the project needs while minimizing impacts to the surrounding environment.

This Project is not yet funded for design or construction.

Project Schedule



Click to enlarge

Page last updated: 19 Sep 2024, 09:56 AM

Who's Listening

Jose Santiago

Project Manager
www.osceola.org/go/hickorytreeroad

Phone 407-742-0332

Email Jose.Santiago@Osceola.org

JS

APPENDIX F

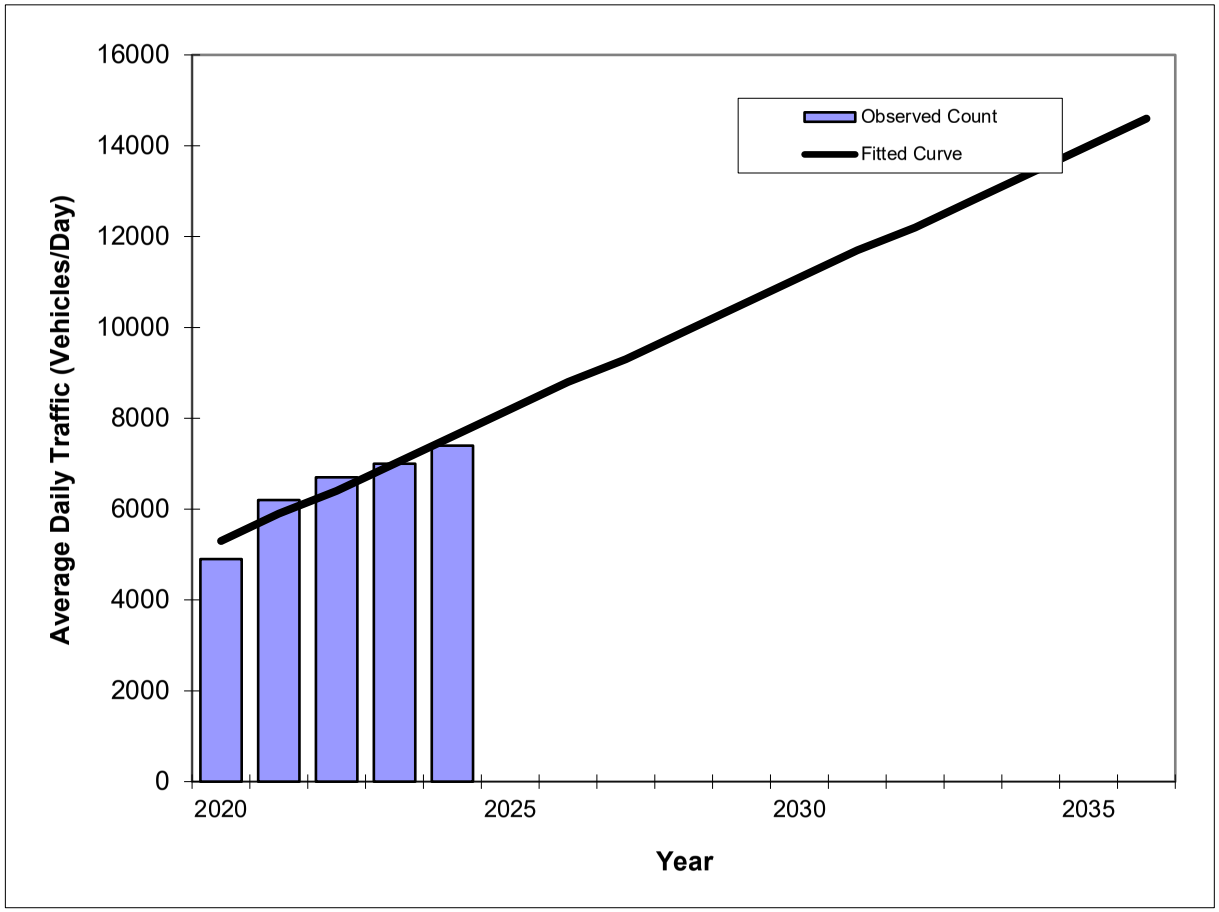
Trends Analysis Worksheets

Traffic Trends - V03.a

OLD HICKORY TREE RD -- Nolte Rd to US 192

FIN#	1234
Location	1

County:	Osceola (92)
Station #:	529
Highway:	OLD HICKORY TREE RD



Year	Traffic (ADT/AADT) Count*	Trend**
2020	4900	5300
2021	6200	5900
2022	6700	6400
2023	7000	7000
2024	7400	7600
2026 Opening Year Trend		
2026	N/A	8800
2031 Mid-Year Trend		
2031	N/A	11700
2036 Design Year Trend		
2036	N/A	14600
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

**** Annual Trend Increase:**	580
Trend R-squared:	90.14%
Trend Annual Historic Growth Rate:	10.85%
Trend Growth Rate (2024 to Design Year):	7.68%
Printed:	26-Sep-24

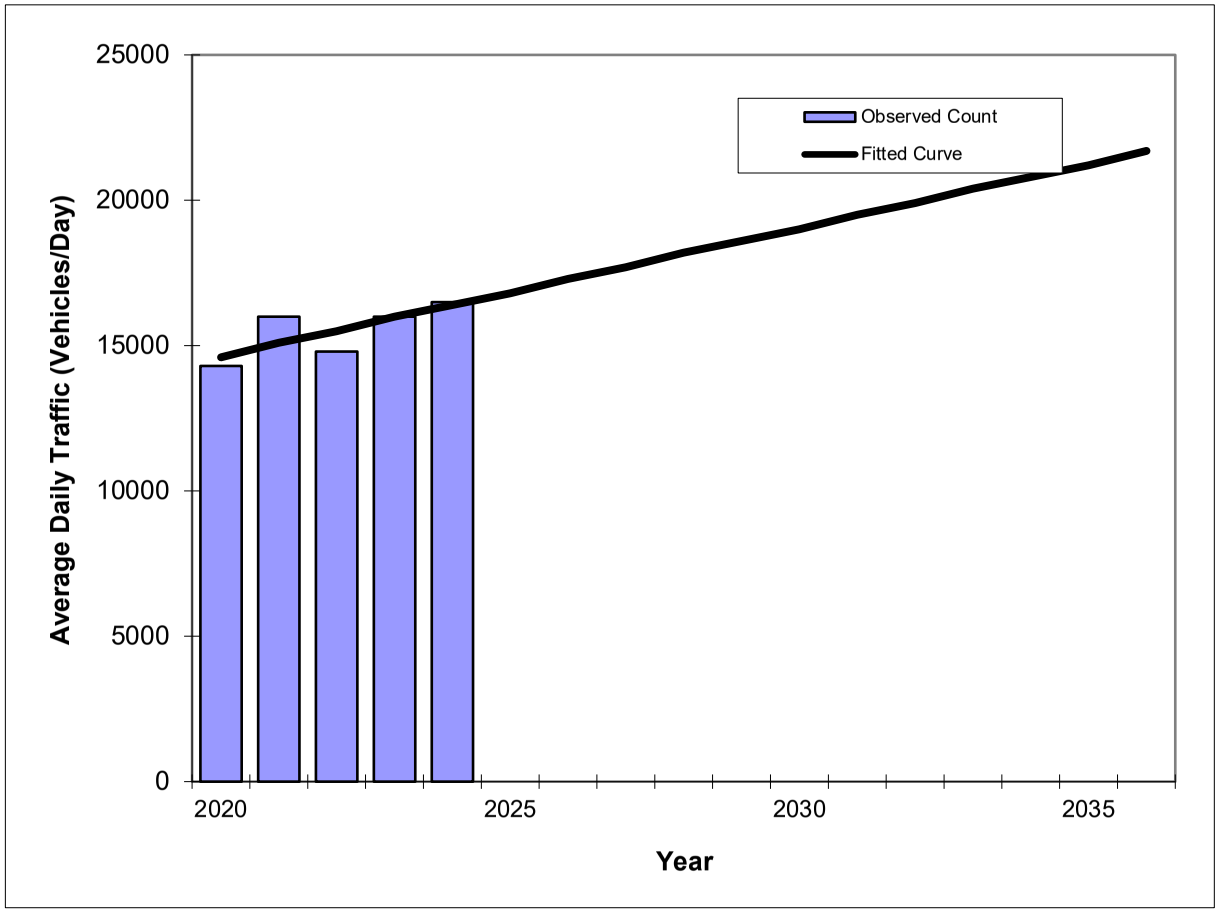
Straight Line Growth Option

Traffic Trends - V03.a

HICKORY TREE RD -- US 192 to Nolte Rd

FIN#	1234
Location	1

County:	Osceola (92)
Station #:	540
Highway:	HICKORY TREE RD



Year	Traffic (ADT/AADT) Count*	Trend**
2020	14300	14600
2021	16000	15100
2022	14800	15500
2023	16000	16000
2024	16500	16400
2026 Opening Year Trend		
2026	N/A	17300
2031 Mid-Year Trend		
2031	N/A	19500
2036 Design Year Trend		
2036	N/A	21700
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	440
Trend R-squared:	56.48%
Trend Annual Historic Growth Rate:	3.08%
Trend Growth Rate (2024 to Design Year):	2.69%
Printed:	26-Sep-24

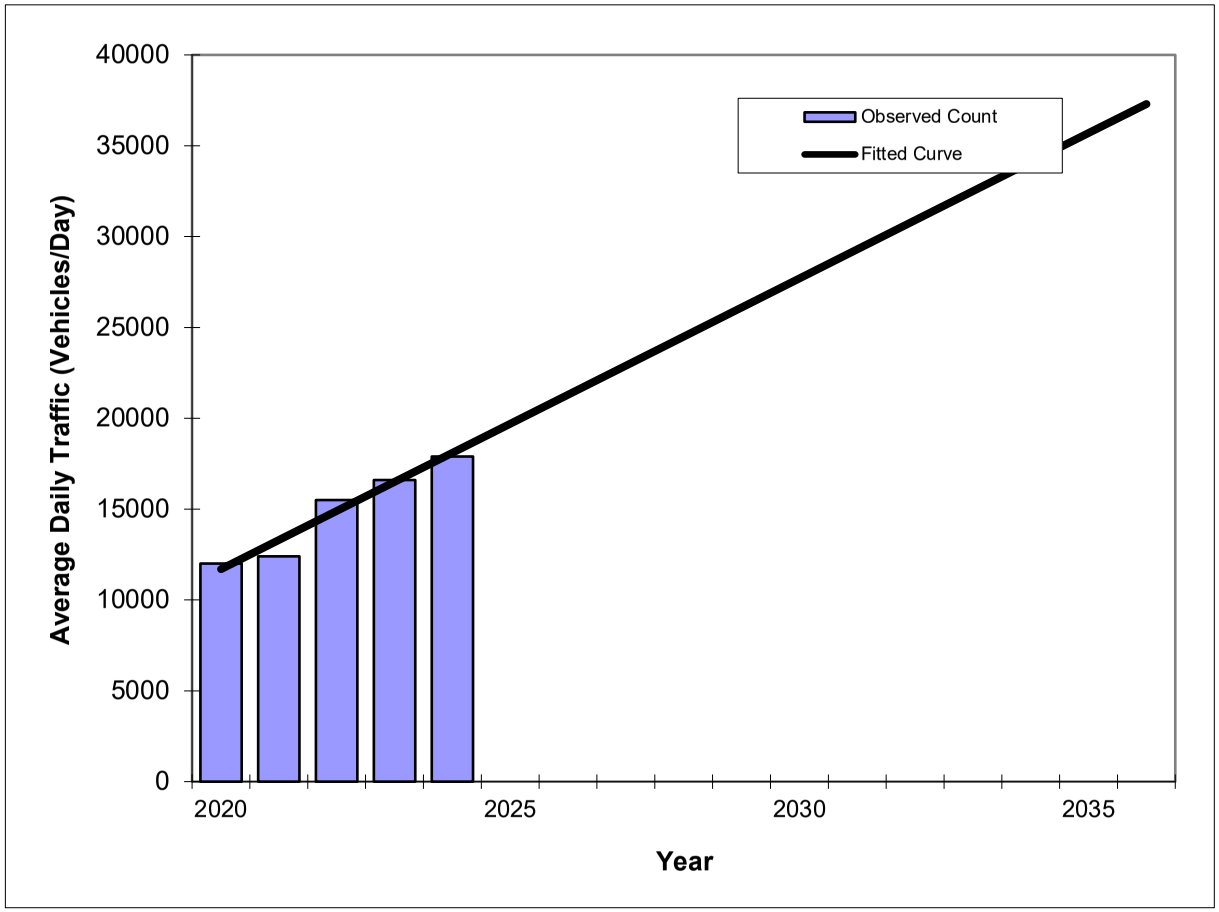
Straight Line Growth Option

Traffic Trends - V03.a

NOLTE RD -- Michigan Ave to Hickory Tree Rd

FIN#	1234
Location	1

County:	Osceola (92)
Station #:	NA4
Highway:	NOLTE RD



Year	Traffic (ADT/AADT) Count*	Trend**
2020	12000	11700
2021	12400	13300
2022	15500	14900
2023	16600	16500
2024	17900	18100
2026 Opening Year Trend		
2026	N/A	21300
2031 Mid-Year Trend		
2031	N/A	29300
2036 Design Year Trend		
2036	N/A	37300
TRANPLAN Forecasts/Trends		

**** Annual Trend Increase:**	1,600
Trend R-squared:	95.14%
Trend Annual Historic Growth Rate:	13.68%
Trend Growth Rate (2024 to Design Year):	8.84%
Printed:	26-Sep-24

Straight Line Growth Option

***Axle-Adjusted**

APPENDIX G

Projected Capacity Analysis Worksheets

HCS Two-Way Stop-Control Report

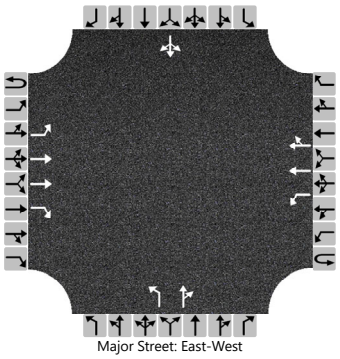
General Information

Analyst	MA
Agency/Co.	TPD, Inc.
Date Performed	9/23/2024
Analysis Year	2025
Time Analyzed	Projected P.M.
Intersection Orientation	East-West
Project Description	5981

Site Information

Intersection	Old Hickory Tree Rd/Clark Rd & Nolte Rd
Jurisdiction	Osceola
East/West Street	Nolte Rd
North/South Street	Old Hickory Tree Rd/Clark Rd
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	1	0	1	2	0		1	1	0		0	1	0
Configuration		L	T	R		L	T	TR		L		TR			LTR	
Volume (veh/h)	0	1	497	115	4	42	585	4		116	0	17		3	1	0
Percent Heavy Vehicles (%)	0	0			0	0				1	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized		No														
Median Type | Storage		Left + Thru								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1			6.4	4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.10			6.40	4.10				7.52	6.50	6.90		7.50	6.50	6.90
Base Follow-Up Headway (sec)		2.2			2.5	2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20			2.50	2.20				3.51	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1				50				126		18			4	
Capacity, c (veh/h)		954				898				328		734			265	
v/c Ratio		0.00				0.06				0.38		0.03			0.02	
95% Queue Length, Q_{95} (veh)		0.0				0.2				1.8		0.1			0.1	
95% Queue Length, Q_{95} (ft)		0.0				5.0				45.4		2.5			2.5	
Control Delay (s/veh)		8.8				9.2				22.7		10.0			18.8	
Level of Service (LOS)		A				A				C		B			C	
Approach Delay (s/veh)		0.0				0.7				21.1				18.8		
Approach LOS		A				A				C				C		

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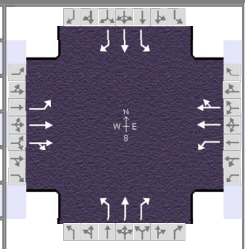
HCS Signalized Intersection Results Summary

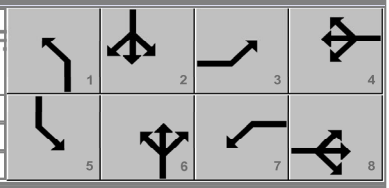
General Information				Intersection Information	
Agency	TPD, Inc.			Duration, h	0.250
Analyst	YS	Analysis Date	Sep 27, 2024	Area Type	Other
Jurisdiction	St Cloud	Time Period	P.M. Peak Hour	PHF	0.91
Urban Street	Hickory Tree Rd	Analysis Year	2025	Analysis Period	1> 16:45
Intersection	E Nolte Rd	File Name	2. Nolte Rd & Hickory Tree Rd - Projected PM.xus		
Project Description	Projected P.M.				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	317	34	196	4	31	26	225	293	6	32	510	332

Signal Information			
Cycle, s	112.6	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.7	6.7	41.4	1.3	14.9	9.7	
Yellow	4.8	0.0	4.8	3.4	4.8	3.4	
Red	2.2	0.0	2.2	3.2	2.0	3.2	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	3	8	7	4	1	6	5	2
Case Number	1.1	4.0	1.1	4.0	1.1	3.0	1.1	3.0
Phase Duration, s	29.6	38.0	7.9	16.3	18.3	55.1	11.7	48.4
Change Period, ($Y+R_c$), s	6.8	6.8	6.6	6.8	6.8	7.0	7.0	7.0
Max Allow Headway (*MAH*), s	4.5	3.2	3.3	3.2	3.5	5.5	3.5	5.5
Queue Clearance Time (g_s), s	21.4	14.6	2.2	4.0	11.3	15.4	3.3	33.2
Green Extension Time (g_e), s	1.3	0.6	0.0	0.1	0.2	11.3	0.0	8.2
Phase Call Probability	1.00	1.00	0.13	1.00	1.00	1.00	0.67	1.00
Max Out Probability	0.02	0.00	0.00	0.00	0.88	0.14	0.00	0.47

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h	348	37	215	4	32	31	247	322	7	35	560	365
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1753	1900	1610	1810	1900	1630	1781	1870	1610	1810	1841	1572
Queue Service Time (g_s), s	19.4	1.6	12.6	0.2	1.7	2.0	9.3	13.4	0.3	1.3	31.2	21.5
Cycle Queue Clearance Time (g_c), s	19.4	1.6	12.6	0.2	1.7	2.0	9.3	13.4	0.3	1.3	31.2	21.5
Green Ratio (*g/C*)	0.30	0.28	0.28	0.10	0.08	0.08	0.49	0.43	0.43	0.41	0.37	0.37
Capacity (*c*), veh/h	506	526	446	181	160	138	324	799	688	451	677	578
Volume-to-Capacity Ratio (*X*)	0.688	0.071	0.483	0.024	0.197	0.225	0.764	0.403	0.010	0.078	0.828	0.631
Back of Queue (*Q*), ft/ln (95 th percentile)	332	33	212	5	38	41	192	243	4	24	536	327
Back of Queue (*Q*), veh/ln (95 th percentile)	12.9	1.3	8.4	0.2	1.5	1.5	7.6	9.6	0.2	1.0	20.8	12.8
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	34.1	30.1	34.0	46.2	48.0	48.1	23.9	22.3	18.6	20.4	32.4	29.3
Incremental Delay (d_2), s/veh	2.0	0.0	0.3	0.0	0.2	0.3	7.0	0.3	0.0	0.1	7.7	2.6
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	36.2	30.1	34.3	46.2	48.3	48.5	31.0	22.7	18.6	20.4	40.1	31.9
Level of Service (LOS)	D	C	C	D	D	D	C	C	B	C	D	C
Approach Delay, s/veh / LOS	35.1	D		48.2	D		26.2	C		36.2	D	
Intersection Delay, s/veh / LOS	33.7						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.12	B	2.14	B	2.27	B	2.28	B
Bicycle LOS Score / LOS	0.98	A	0.54	A	1.44	A	2.07	B

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HCS Two-Way Stop-Control Report

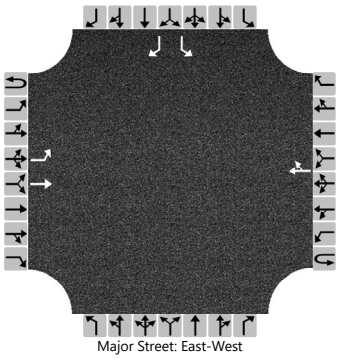
General Information

Analyst	YS
Agency/Co.	TPD, Inc.
Date Performed	9/23/2024
Analysis Year	2025
Time Analyzed	Projected P.M.
Intersection Orientation	East-West
Project Description	5981

Site Information

Intersection	Old Hickory Tree Rd &Gramercy Farms Blvd/...
Jurisdiction	Osceola
East/West Street	CR 534/Gramercy Farms Blvd/Old Hickory Tr...
North/South Street	Old Hickory Tree Rd
Peak Hour Factor	0.83
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		1	0	1
Configuration		L	T					TR						L		R
Volume (veh/h)		78	49				107	42						32		103
Percent Heavy Vehicles (%)		1												0		0
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized														No		
Median Type | Storage			Left + Thru								1					

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.11												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.21												3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		94												39		124
Capacity, c (veh/h)		1402												621		897
v/c Ratio		0.07												0.06		0.14
95% Queue Length, Q_{95} (veh)		0.2												0.2		0.5
95% Queue Length, Q_{95} (ft)		5.0												5.0		12.5
Control Delay (s/veh)		7.8												11.2		9.7
Level of Service (LOS)		A												B		A
Approach Delay (s/veh)		4.8												10.0		
Approach LOS		A												B		

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HCS Two-Way Stop-Control Report

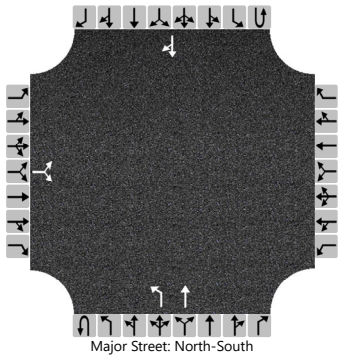
General Information

Analyst	YS
Agency/Co.	TPD, Inc.
Date Performed	9/23/2024
Analysis Year	2025
Time Analyzed	Projected P.M.
Intersection Orientation	North-South
Project Description	5981

Site Information

Intersection	Hickory Tree Rd & CR 534/Old Hickory Tree Rd
Jurisdiction	Osceola
East/West Street	CR 534/Old Hickory Tree Rd
North/South Street	Hickory Tree Rd
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	1	0	0	0	1	0
Configuration			LR							L	T					TR
Volume (veh/h)		46		32						47	488				638	100
Percent Heavy Vehicles (%)		2		0						5						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.42		6.20						4.15						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.52		3.30						2.25						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			88							53						
Capacity, c (veh/h)			190							790						
v/c Ratio			0.46							0.07						
95% Queue Length, Q_{95} (veh)			2.2							0.2						
95% Queue Length, Q_{95} (ft)			55.5							5.2						
Control Delay (s/veh)			39.2							9.9						
Level of Service (LOS)			E							A						
Approach Delay (s/veh)		39.2								0.9						
Approach LOS		E								A						

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HCS Two-Way Stop-Control Report

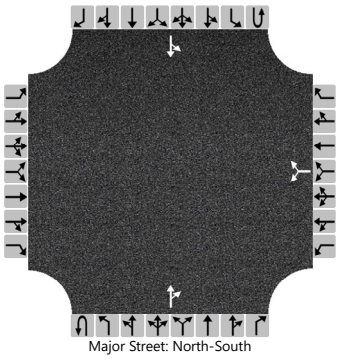
General Information

Analyst	MA
Agency/Co.	TPD, Inc.
Date Performed	9/23/2024
Analysis Year	2025
Time Analyzed	Projected P.M.
Intersection Orientation	North-South
Project Description	5981

Site Information

Intersection	Site Access @ Old Hickory Tree Rd
Jurisdiction	Osceola
East/West Street	Site Access
North/South Street	Old Hickory Tree Rd
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						3		18			115	5		30	132	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.13		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							24							34		
Capacity, c (veh/h)							859							1443		
v/c Ratio							0.03							0.02		
95% Queue Length, Q_{95} (veh)							0.1							0.1		
95% Queue Length, Q_{95} (ft)							2.6							2.6		
Control Delay (s/veh)							9.3							7.6	0.2	
Level of Service (LOS)							A							A	A	
Approach Delay (s/veh)						9.3								1.6		
Approach LOS						A								A		

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Meeting: November 13, 2025

Agenda Item Type: Consent Agenda Old Hickory Tree Estates Final Master Plan (fka Vista Grand Properties)

Community Development Agenda Item:
Request City Council's approval of Old Hickory Tree Estates Final Master Plan (fka Vista Grand Properties), PUD24-00007
COST: No cost is associated with this item.
This item is to approve the Final Master Plan for Old Hickory Tree Estates (fka Vista Grand Properties), which contains 54 single-family detached dwelling units with site open space, amenities, and associated infrastructure on approximately +/- 14.36 acres of land, generally located north of Gramercy Farms Boulevard, east of Old Hickory Tree Road, west of Hickory Tree Road, and south of Nolte Road.

Strategic Key Focus Areas:
High-Performing Government

Background Information:
The subject property is generally located north of Gramercy Farms Boulevard, east of Old Hickory Tree Road, south of Nolte Road, and west of Hickory Tree Road. The development as proposed will support residential infill in an appropriate area with existing infrastructure, compatible residential uses, and auxiliary access to arterial roadways.

The proposed Residential FMP maintains the general layout of the original PUD (Ordinance No. 2024-27) by proposing 54 single-family units. The proposed development will provide for infill residential development at a density of 3.4 dwelling units per acre compatible with the underlying low-density residential Future Land Use that allows for up to 4 dwelling units per acre.

The property was annexed into the City of St. Cloud by Ordinance No. 2023-30. The property received a Future Land Use designation of low density residential (Ordinance No. 2024-26) and a Planned Unit Development "PUD" zoning district (Ordinance No. 2024-27) to allow for the development of 54 single-family dwelling units with site open space, amenities, and associated infrastructure.

Legal Authority:
Per Land Development Code Section 1.1.7 – the City Council, at its regularly scheduled meeting, shall review the Final Master Plan. Based on the information generated and the comments made during the development review, the City Council shall approve, disapprove or approve subject to stated conditions. Approval of the Final Master Plan shall authorize review for approval of the Subdivision Construction Plans by the Development Review Committee as outlined in section 2.4.4.

Budget and Recommendation:
There is no cost associated with this item.

Staff reviewed this request for a Final Master Plan on or before July 17, 2025, with no objections. Therefore, staff recommends **APPROVAL** of the Final Master Plan (FMP) for Old Hickory Tree Estates (fka Vista Grand Properties PUD).

Finance Director's Comments:
N/A

Procurement Director's Comments:
N/A

City Manager's Comments:
City Manager recommends approval

City Council Action:
11/13/25 - Final Action

Attachments:
1. 1. PUD24-00007 Old Hickory Tree Estates FMP Staff Report 11.13.25 CC
2. 2. PUD24-00007_School Capacity Report
3. 3. PUD24-00007_Old Hickory Tree Estates FMP (fka Vista Grand Properties) FMP Plans
4. 4. PUD24-00007 Landscape Plans

City Council Meeting
Meeting Date: November 13, 2025

DRC Case No.
PUD24-00007

Type of Application
Final Master Plan

Case Name
Old Hickory Tree Estates (fka Vista Grand Properties PUD)

Applicant/Agent
Vista Grande Properties, LLC / Knight Engineering Services, Inc.

Owner(s)
Same as applicant

Address/Location
North and East of Old Hickory Tree Rd, West of Hickory Tree Rd, and South of Nolte Rd.

Parcel ID Nos.
192631495000010180, 192631495000010155, 192631495000010150, and 192631495000010020

Total Land Area
+/- 14.36 acres

Project Planner
Marcos Bastian, AICP
Deputy Director of Community Development

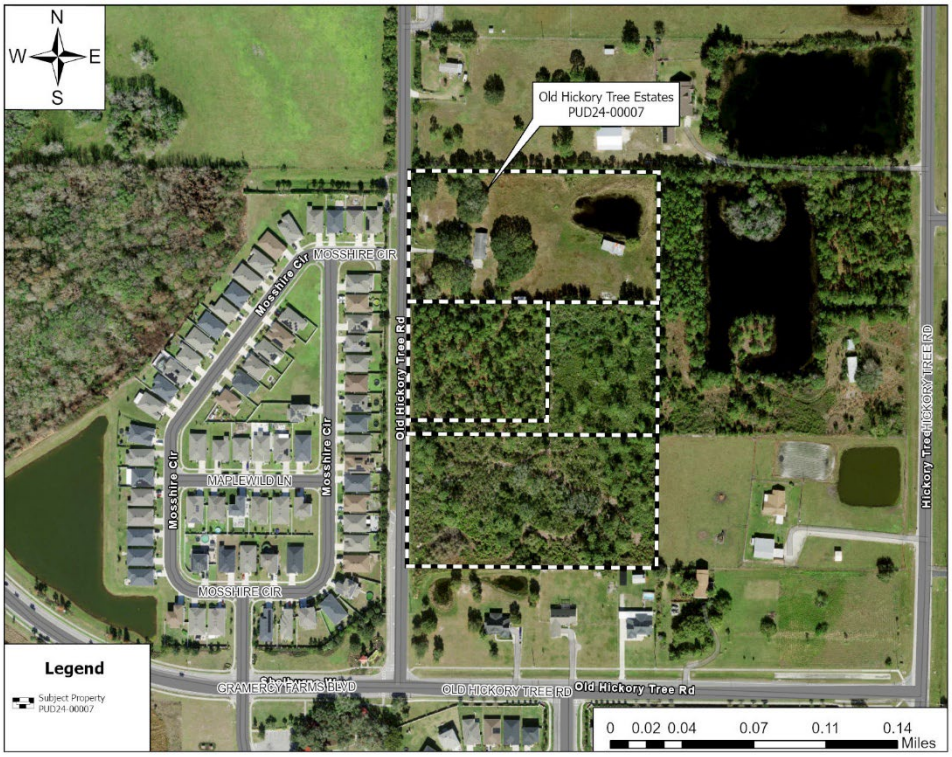


Figure 1 – Aerial Map

Request

The applicant is requesting approval of the Final Master Plan (FMP) for Old Hickory Tree Estates (fka Vista Grand Properties PUD), a residential subdivision on approximately +/-14.36 acres of land. The property is shown in **Figure 1** above.

Background

The subject property is generally located north of Gramercy Farms Boulevard, east of Old Hickory Tree Road, south of Nolte Road, and west of Hickory Tree Road. The development as proposed will support residential infill in an appropriate area with existing infrastructure, compatible residential uses, and auxiliary access to arterial roadways.

The proposed Residential FMP maintains the general layout of the original PUD (Ordinance No. 2024-27) by proposing 54 single-family units. The proposed development will provide for infill residential development at a density of 3.4 dwelling units per acre compatible with the underlying low-density residential Future Land Use that allows for up to 4 dwelling units per acre.

The property was annexed into the City of St. Cloud by Ordinance No. 2023-30. The property received a Future Land Use designation of low density residential (Ordinance No. 2024-26) and a Planned Unit Development "PUD" zoning district (Ordinance No. 2024-27) to allow for the development of 54 single-family dwelling units with site open space, amenities, and associated infrastructure.

Project Description

The proposed development encompasses four vacant lots for a combined acreage of +/- 14.36 acres of land and will provide an additional 54 single-family units to the surrounding area. These units will be compatible with the size, architecture, and pricing structure of the existing subdivisions and single-family units in the surrounding area.

Primary access for residents will be to and from Old Hickory Tree Rd with three additional stub-outs for future development connections to the north, east and south property lines. The homes proposed within the development will be all single-family detached units and will be a mix of front-loaded and rear-loaded types. A portion of the units fronting the lakefront park will provide homeowners with enhanced vistas.

The stormwater management pond will be in the northeast corner of the subject property with a lakefront pedestrian trail along the pond's shoreline. This lakefront pedestrian trail will be for the use of all residents within the area.

To provide the community with added benefits above and beyond the minimum code requirements, the applicant has:

1. Provided an excess of 364 DHB tree inches. This equates to (125) additional 3" caliper large trees within the project limits.
2. Increased the perimeter buffers from a 10' width to a 15' width adding more landscape area and screening.
3. Increased the minimum number of Large/Medium sized trees. A minimum of 70% of the trees on site are required to be Large/Medium sized trees. We have provided 97% Large/Medium sized trees within the project limits.
4. Increased the open space area of 3.44 ac. to 4.32 ac.
5. Increased parking capacity from 41 to 43 on-street spaces and additional parking near the recreation area.
6. 0.66 acres amenitized stormwater pond area with a 10' walking path and benches.
7. 0.32 acres playground area.

Development Program

Use	Total Units
Single-Family Detached	54

School Capacity Report

The District has a history of working closely with the County and two municipalities to alleviate school capacity issues created by expanded residential development. The School District of Osceola County reserves its right to ensure proper mitigation of any impact on school capacity and the collection of Educational System Impact Fees. See attached School Capacity Report for further information.

Consistency With Strategic Plan Goals:

The proposed Preliminary Subdivision Plan meets the intent of the following City of St. Cloud Strategic Goals:

- ***High-Performing Government:*** *Focus on the continuity and sustainability of core public services.*

Staff Recommendation

Staff reviewed this request for a Final Master Plan on or before July 17, 2025, with no objections. Therefore, staff recommends **APPROVAL** of the Final Master Plan (FMP) for Old Hickory Tree Estates (fka Vista Grand Properties PUD).

City Council Requested Action

Per Land Development Code Section 1.1.7 – the City Council, at its regularly scheduled meeting, shall review the Final Master Plan. Based on the information generated and the comments made during the development review, the City Council shall approve, disapprove or approve subject to stated conditions. Approval of the Final Master Plan shall authorize review for approval of the Subdivision Construction Plans by the Development Review Committee as outlined in section 2.4.4.

Attachments

- School Capacity Report
- Final Master Plan
- Landscape Plans

THE SCHOOL DISTRICT OF OSCEOLA COUNTY, FLORIDA

PLANNING SERVICES DEPARTMENT

SCHOOL CAPACITY REPORT - THREE YEAR OUTLOOK

Date:	12.09.24	**Current FLU:**	MDR
SDOC #:	2023/24-0066	**Requested FLU:**	N/A
Jurisdiction:	St,. Cloud	**Current Zoning:**	PUD
DRC #:	PUD24-00007	**Requested Zoning:**	N/A
Project Name:	Vista Grande Properties PUD Final Master Plan	**PID:**	19-26-31-4950-0001-0020 / 0150
Project Location:	Old Hicory Tree Rd., St. Cloud		19-26-31-4950-0001-0155 / 0180
Comments Due Date:	01.09.25		
AC:	14.36		

If proposed project increases utilization of schools above adopted level of service, applicant will obtain a Letter of Agreement outlining an accommodation plan for the students generated by this project, consistent with the provisions of Sections 6.1. - 6.7. of the Interlocal Agreement for the Planning and Coordination of Public Schools throughout Osceola County (as required by Section 163.31777, F.S.[2012]). "The County/Cities and the applicant must collaborate with the School Board to identify available means that might be used to achieve sufficient capacity to accommodate the development, which may include, but not be limited to developer contributions, project phasing, or developer provided facility improvements." If you should have any questions please feel free to contact the Osceola School District Planning Services Department at 407-518-2964.

Total Proposed Residential Units by Type

SF	54	**TH**	0	**MF**	0
Single Family		Townhome		Multi-Family	
Condo	0	**MH**	0	**STR**	0
Condominium		Mobile Home		Short Term Rental	
HOP	0	**VV**	0	**AWH**	0
Housing for Older Persons		Vacation Villas		Affordable-Workforce Housing	

Estimated Number of New Students Generated by Proposed Development

Elem. (K-5)	8	**Middle (6-8)**	5	**High (9-12)**	8

Student Generation Calculations

Example Calculation: 100 (SF Units) x 0.178 (Elem. Rate) = 18 (Students)

Residential Categories					
Total Units	SF	TH	MF	Condo	MH
54	54	0	0	0	0

Student Generations Rates			
	Elem. (K-5)	Middle (6-8)	High (9-12)
SF	0.139	0.086	0.144
TH	0.096	0.052	0.089
MF	0.157	0.083	0.114
CONDO	0.059	0.03	0.047
MH	0.107	0.065	0.082

Total Students	
Elem (K-5)	8
Middle (6-8)	5
High (9-12)	8

Level of Service (LOS)

	2024-2025			2026-2027		
School Boundaries Impacted	COFTE	Permanent Student Capacity	Current Level of Service	3 YR. Projected COFTE	Projected COFTE w/ Impact	Projected LOS w/ Impact
HTES	696	954	73%	715	1,133	119%
HRMS	912	1,286	71%	882	1,259	98%
HRHS	2,573	2,669	96%	2,667	3,124	117%

Comments

The District has a history of working closely with the County and two municipalities to alleviate school capacity issues created by expanded residential development. The School District of Osceola County reserves its right to ensure proper mitigation of any impact on school capacity and the collection of Educational System Impact Fees.

Hickory Tree Elementary - Capacity may be met through space reconfigurations, redistricting and/or charter schools. A proposed new K-8 school is planned and funded to open in the 2026/2027 school year and may provide relief to Hickory Tree Elementary School.

Harmony Middle - Capacity may be met through space reconfigurations, redistricting and/or charter schools. A proposed new K-8 school is planned and funded to open in the 2026/2027 school year and may provide relief to Harmony Community School.

THE SCHOOL DISTRICT OF OSCEOLA COUNTY, FLORIDA

PLANNING SERVICES DEPARTMENT

SCHOOL CAPACITY REPORT - THREE YEAR OUTLOOK

Date: 12.09.24
SDOC #: 2023/24-0066
Jurisdiction: St,. Cloud
DRC #: PUD24-00007

Comments cont.

Harmony High is over capacity and utilizes five (5) relocatables to accommodate its existing enrollment. A new high school has been funded and is scheduled to open for the 2026/2027 school year and will provide relief for Harmony High School. Additional capacity may be met through existing space reconfigurations, redistricting and/or charter schools.

FINAL MASTER PLANS
FOR
OLD HICKORY TREE ESTATES
SECTION 19, TOWNSHIP 26S, RANGE 31E, CITY OF ST. CLOUD, OSCEOLA COUNTY, FLORIDA

UTILITY ASSETS TABLE

SANITARY SEWER

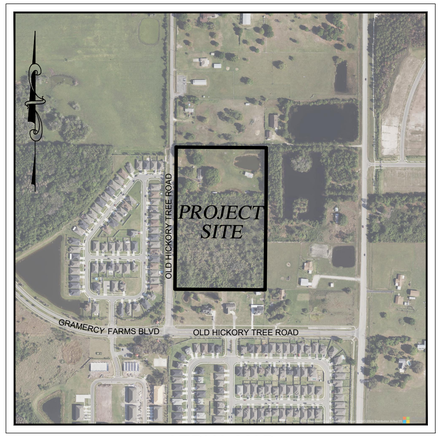
GRAVITY MAINS	
8" SDR-35 PVC	1,964 LF
10" DR11 HDPE	24.5 LF
TOTAL	1,988.5 LF
MANHOLES	
4' DIA STANDARD CONC.	5 EA
4' DIA POLYMER CONC.	4 EA
5' DIA POLYMER CONC.	1 EA
5' DIA POLYMER CONC. w/ DROP	1 EA
TOTAL	11 EA
FORCE MAINS	
4" DR25 (C900) PVC	661 LF
4" DR11 (C906) HDPE	185 LF
TOTAL	846 LF
4" GATE VALVES	4 EA
AIR RELEASE VALVES	2 EA
DOUBLE SANITARY LATERALS	23 EA
SINGLE SANITARY LATERALS	9 EA

POTABLE WATER MAIN

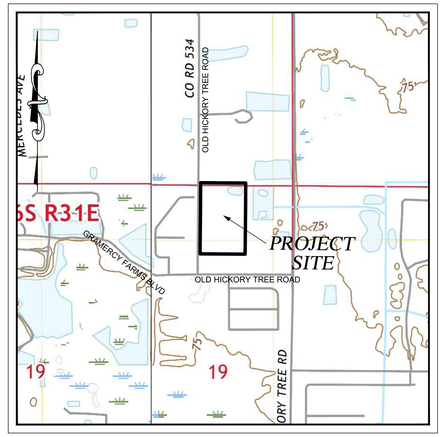
MAINS	
8" DR18 (C900) PVC	3,314 LF
6" DR18 (C900) PVC	692 LF
TOTAL	4,006 LF
GATE VALVES	
8"	23 EA
6"	3 EA
FIRE HYDRANTS	5 EA
DOUBLE POTABLE SERVICES	23 EA
SINGLE POTABLE SERVICES	10 EA

RECLAIMED WATER MAIN

MAINS	
4" DR18 (C900) PVC	2,729 LF
8" DR18 (C900) PVC	2,593 LF
TOTAL	5,322 LF
GATE VALVES	
8"	4 EA
4"	17 EA
DOUBLE RECLAIMED SERVICES	23 EA
SINGLE RECLAIMED SERVICES	12 EA



AERIAL MAP
SCALE 1"=500' REF: AUTODESK



VICINITY MAP
SCALE 1"=1000' REF: USGS

SHEET INDEX

SHEET #	SHEET TITLE
01	COVER SHEET
02	GENERAL NOTES
03	PRE-DEVELOPMENT, EROSION AND DUST ABATEMENT PLAN
04	AERIAL OVERLAY PLAN
05	GEOMETRY PLAN
06	GRADING AND DRAINAGE PLAN
07	MASTER UTILITY PLAN
08	UTILITY PLAN
09	SIGNAGE, MARKING, AND LIGHTING PLAN
10	OFFSITE UTILITY PLAN 1
11	OFFSITE UTILITY PLAN 2
12	OFFSITE UTILITY PLAN 3
13	OFFSITE UTILITY PLAN 4
14	OFFSITE UTILITY PLAN 5
15	OFFSITE IMPROVEMENTS OLD HICKORY TREE ROAD
16	OLD HICKORY TREE ROAD CROSS-SECTIONS
17	OLD HICKORY TREE ROAD CROSS-SECTIONS
18	PLAN & PROFILE STREET A
19	PLAN & PROFILE STREET B
20	PLAN & PROFILE STREET C & ALLEY E
21	PLAN & PROFILE ALLEY D
22	SITE CROSS-SECTION A-A
23	SITE CROSS-SECTION B-B
24	SITE CROSS-SECTIONS C-C, D-D, AND E-E
25	CITY OF ST. CLOUD NOTES AND DETAILS
26	CITY OF ST. CLOUD NOTES AND DETAILS
27	CITY OF ST. CLOUD NOTES AND DETAILS
28	TOHO WATER AUTHORITY GENERAL NOTES
29	TOHO WATER AUTHORITY WATER DETAILS
30	TOHO WATER AUTHORITY WATER DETAILS
31	TOHO WATER AUTHORITY WATER DETAILS
32	TOHO WATER AUTHORITY SEWER DETAILS
33	TOHO WATER AUTHORITY LIFT STATION DETAILS
34	TOHO WATER AUTHORITY LIFT STATION DETAILS
35	TOHO WATER AUTHORITY LIFT STATION DETAILS
36	TOHO WATER AUTHORITY LIFT STATION DETAILS
37	TOHO WATER AUTHORITY LIFT STATION DETAILS
38	TOHO WATER AUTHORITY LIFT STATION DETAILS
39	TOHO WATER AUTHORITY LIFT STATION DETAILS

LEGAL DESCRIPTION (PROVIDED BY SURVEYOR)

A PARCEL OF LAND BEING LOTS 2, 15, AND 18 OF THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION, PLAT BOOK B, PAGE 25, AND LYING IN SECTION 19, TOWNSHIP 26 SOUTH, RANGE 31 EAST, OSCEOLA COUNTY, FLORIDA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT BEING THE NORTHWEST CORNER OF SAID LOT 15, SAID POINT BEING IN THE EAST RIGHT OF WAY LINE OF OLD HICKORY TREE ROAD; RUN THENCE ALONG SAID EAST RIGHT OF WAY LINE, N.00°15'35"E., A DISTANCE OF 331.68 FEET TO THE NORTHWEST CORNER OF AFORESAID LOT 2; THENCE LEAVING SAID EAST RIGHT OF WAY LINE ALONG THE NORTH BOUNDARY OF SAID LOT 2, S.89°37'03"E., A DISTANCE OF 629.89 FEET TO THE NORTHEAST CORNER OF SAID LOT 2; RUN THENCE ALONG THE EAST BOUNDARY OF SAID LOT 2, S.00°15'35"W., A DISTANCE OF 331.68 FEET TO THE SOUTHEAST CORNER OF SAID LOT 2; RUN THENCE ALONG THE EAST BOUNDARY OF AFORESAID LOTS 15 AND 18, S.00°36'42"W., A DISTANCE OF 661.71 FEET TO THE SOUTHEAST CORNER OF SAID LOT 18; THENCE ALONG THE SOUTH BOUNDARY OF SAID LOT 18, N.89°37'03"W., A DISTANCE OF 629.89 FEET TO A POINT BEING THE SOUTHWEST CORNER OF SAID LOT 18, SAID POINT BEING IN THE AFORESAID EAST RIGHT OF WAY LINE OF OLD HICKORY TREE RD.; THENCE ALONG SAID EAST RIGHT OF WAY LINE OF OLD HICKORY TREE RD., N.00°36'42"E., A DISTANCE OF 661.71 FEET TO THE POINT OF BEGINNING.

CONTAINING 14.365 ACRES MORE OR LESS.

PROJECT TEAM

APPLICANT/DEVELOPER	CIVIL ENGINEER
STONEBRIDGE DEVELOPMENT, LLC 4327 SOUTH US HIGHWAY 27, SUITE 607 CLERMONT, FLORIDA 34711 (850) 321-4774 andrew.matella@gmail.com CONTACT: ANDREW MATELLA	KNIGHT ENGINEERING SERVICES, INC. 770 ALMOND STREET, SUITE B CLERMONT, FLORIDA 34711 (352) 394-8514 tknight@knighteng.com CONTACT: TOM KNIGHT
LAND SURVEYOR	**LAND PLANNER**
GEOPOINT SURVEYING, INC. 555 WINDERLY PLACE, SUITE 120 MAITLAND, FLORIDA 32751 (321) 270-0440 CONTACT: MATT CHEPOLIS	RJ WHIDDEN AND ASSOCIATES, INC. 316 CHURCH STREET KISSIMMEE, FLORIDA 34741 (407) 846-1880 CONTACT: JOHN RYAN ADAMS
LANDSCAPE ARCHITECT	**ENVIRONMENTAL SPECIALIST**
NFC LANDSCAPE ARCHITECTS, INC. 611 NORTH MILLS AVEENUE #536433 ORLANDO, FLORIDA 32853 (321) 388-4781 CONTACT: KARINA VEAUDRY	BIO-TECH CONSULTING, INC. 3025 E SOUTH STREET ORLANDO, FLORIDA 32803 (407) 894-5969 CONTACT: NATHAN JOHNSON
CONSULTING ENGINEER - TRAFFIC	**CONSULTING ENGINEER - LIGHTING**
TRAFFIC PLANNING AND DESIGN, INC. 535 VERSAILLES DRIVE MAITLAND, FLORIDA 32751 (407) 628-9955 CONTACT: TURGUT DERVISH	BOBES ASSOCIATES CONSULTING ENGINEERS, INC. 150 CIRCLE DRIVE MAITLAND, FLORIDA 32751 (407) 628-0882 CONTACT: GUS BOBES JR., P.E.

UTILITY SERVICE PROVIDERS

POTABLE WATER	ELECTRIC
TOHO WATER AUTHORITY 951 MARTIN LUTHER KING JR. BOULEVARD KISSIMMEE, FLORIDA 34741 (407) 944-5000	OUC ELECTRIC 5003 PERSHING AVENUE ORLANDO, FLORIDA 32822 (407) 384-4100
SANITARY SEWER	**RECLAIMED WATER**
TOHO WATER AUTHORITY 951 MARTIN LUTHER KING JR. BOULEVARD KISSIMMEE, FLORIDA 34741 (407) 944-5000	TOHO WATER AUTHORITY 951 MARTIN LUTHER KING JR. BOULEVARD KISSIMMEE, FLORIDA 34741 (407) 944-5000

SITE DATA

GENERAL INFORMATION

ALTKEYS.....1094637
1094638
1094639
1094642
PARCEL IDS....19-26-31-4950-0001-0020
19-26-31-4950-0001-0150
19-26-31-4950-0001-0155
19-26-31-4950-0001-0180
MUNICIPALITY.....CITY OF ST. CLOUD
ZONING.....PLANNED UNIT DEVELOPMENT
FLU.....MEDIUM DENSITY RESIDENTIAL
EXISTING USE.....SINGLE FAMILY/VACANT RES.

CHARACTERISTICS

GROSS PROPERTY AREA ..14.36 ACRES
625,717.87 SQ. FT.
PROPOSED NUMBER OF LOTS 54
MAX. GROSS DENSITY.....10 D.U./AC.
PROP. GROSS DENSITY.....3.76 D.U./AC.
MINIMUM OPEN SPACE 20.00%
PROVIDED OPEN SPACE 30.08%
MAX. BUILDING HEIGHT.....35 FEET
MAX. LOT COVERAGE.....65.00%

LANDSCAPE BUFFERS:
NORTH.....15 FEET
SOUTH.....15 FEET
EAST.....15 FEET
WEST.....15 FEET

LAND USES TABLE

ID	LAND USE	AREA (AC.)	AREA (SQ. FT.)
LOTS	RESIDENTIAL AREA	6.55	285,614.60
R.O.W.	PUBLIC RIGHT-OF-WAY	3.41	148,433.13
TRACT A	OPEN SPACE (BUFFER)	0.31	13,575.01
TRACT B	OPEN SPACE (BUFFER)	0.31	13,618.30
TRACT C	OPEN SPACE (STORMWATER, REC, BUFFER)	3.05	132,715.39
TRACT D	OPEN SPACE (AMENITY CENTER)	0.32	13,750.00
TRACT E	OPEN SPACE (BUFFER)	0.33	14,411.44
TRACT F	PUBLIC UTILITY (LIFT STATION)	0.08	3,600.00
TOTAL		14.36	625,717.87

DATE	REVISION
Mar. 2025	Revised per TWA comments dated Feb. 3, 2025

Knight Engineering Services
Certificate of Authorization No. 00029972
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont Florida 34711
Phone (352) 394-8514

NOTE: ENGINEER'S SEAL APPLIES TO SHEETS 1-26 ONLY

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Thomas L. Knight, PE, on June 18, 2025.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

CONSTRUCTION PLANS FOR OLD HICKORY TREE ESTATES

GENERAL PROJECT DATA

PRIOR TO THE COMMENCEMENT OF ANY WORK, A PRECONSTRUCTION MEETING WITH THE CITY OF ST. CLOUD IS REQUIRED.

BOUNDARY AND TOPOGRAPHIC SURVEY FOR THIS PROJECT, DATED AUGUST 5, 2022, PROVIDED BY GEOPOINT SURVEYING, INC.

THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITIES AND TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATIONS TO THESE UTILITIES WITH THE OWNER OF THE UTILITY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING AN UNDERGROUND OR OVERHEAD UTILITY, WHETHER SHOWN ON THE PLAN OR LOCATED BY THE UTILITY COMPANY. ALL UTILITIES THAT INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE BE RELOCATED BY THE RESPECTIVE UTILITY COMPANY AND THE CONTRACTOR SHALL COOPERATE WITH THEM DURING RELOCATION OPERATIONS. ANY DELAY OR INCONVENIENCE CAUSED TO THE CONTRACTOR BY THE RELOCATION OF VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED.

THE UTILITIES ARE THE PROPERTY OF THE FOLLOWING:

WATER
TOHO WATER AUTHORITY
951 MLK JR. BOULEVARD
KISSIMMEE, FLORIDA 34741
(407) 944-5000

SEWER
TOHO WATER AUTHORITY
951 MLK JR. BOULEVARD
KISSIMMEE, FLORIDA 34741
(407) 944-5000

POWER
OUC ELECTRIC
5003 PERSHING AVENUE
ORLANDO, FLORIDA 32822
(407) 384-4100

GAS
FLORIDA PUBLIC UTILITIES
(800) 427-7712

PHONE/TV/INTERNET
SPECTRUM
1315 KENTUCKY AVENUE
ST. CLOUD, FLORIDA 34769
(407) 708-9264

PHONE/TV/INTERNET
AT&T
4305 13TH STREET
ST. CLOUD, FLORIDA 34769
(407) 957-5932

CITY OF ST. CLOUD STANDARDS AND SPECIFICATIONS

ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF ST. CLOUD LAND DEVELOPMENT CODE (LDC).

SHOP DRAWINGS

SHOP DRAWINGS AND CERTIFICATIONS FOR ALL STORM DRAINAGE, WATER SYSTEM, RECLAIMED WATER SYSTEM, SEWER SYSTEM, AND PAVING SYSTEM MATERIALS AND STRUCTURES ARE REQUIRED. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING THE MATERIALS REQUIRED FOR CONSTRUCTION.

AS-BUILTS

A COMPLETE AS-BUILT SURVEY SHALL BE PROVIDED TO THE ENGINEER BY THE SITE CONTRACTOR NO LESS THEN 2 WEEKS PRIOR TO FINAL INSPECTION. ALL AS-BUILT SURVEYS SHALL BE PREPARED BY A FLORIDA LICENSED LAND SURVEYOR. TWO (2) SIGNED, SEALED AND DATED HARD COPIES, ONE (1) ELECTRONIC COPY (DWG FORMAT) AND ONE (1) ELECTRONIC COPY (PDF FORMAT) SHALL BE PROVIDED TO THE ENGINEER. ADDITIONAL AS-BUILT REQUIREMENTS AS REQUIRED BY ST. CLOUD OR AS INCLUDED IN THE AFOREMENTIONED DOCUMENTS.

PERMITS AND PERMIT REQUIREMENTS

THE CONTRACTOR SHALL OBTAIN FROM THE OWNER COPIES OF ALL REGULATORY AND LOCAL AGENCY PERMITS. THE CONTRACTOR SHALL BE EXPECTED TO REVIEW AND ABIDE BY ALL THE REQUIREMENTS AND LIMITATIONS SET FORTH IN THE PERMITS. A COPY OF THE APPLICABLE PERMITS SHALL BE KEPT ON THE JOB AT ALL TIMES.

LAYOUT AND CONTROL

UNLESS OTHERWISE NOTED ON THE PLANS, THE CONTRACTOR SHALL PROVIDE FOR THE LAYOUT OF ALL THE WORK TO BE CONSTRUCTED. BENCHMARK INFORMATION SHALL BE PROVIDED TO THE CONTRACTOR BY THE OWNER OR OWNER'S SURVEYOR. ANY DISCREPANCIES BETWEEN FIELD MEASUREMENTS AND CONSTRUCTION PLAN INFORMATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.

DRAINAGE SYSTEMS

THE CONTRACTOR SHALL PERFORM ALL WORK PERTAINING TO DRAINAGE INCLUDING EXCAVATION OF W.R.A. PRIOR TO THE COMMENCEMENT OF OTHER WORK INCLUDED IN THESE PLANS. THE DRAINAGE FACILITIES SHALL BE MAINTAINED BY THE CONTRACTOR DURING THE COURSE OF THIS CONTRACT. THE CONTRACTOR SHALL INCLUDE FUNDS IN THE DRAINAGE COSTS OF THE CONTRACT TO OPERATE AND MAINTAIN THE DRAINAGE SYSTEMS DURING THE WORK PROCESS.

QUALITY CONTROL TESTING REQUIREMENTS

ALL TESTING RESULTS SHALL BE PROVIDED TO THE ENGINEER. ALL TESTING REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF ST. CLOUD. TEST RESULTS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
- -SOIL DENSITY TESTS
- -CONCRETE COMPRESSIVE STRENGTH TESTS
- -LAMPING AND TV INSPECTIONS
- -INFILTRATION/EXFILTRATION TESTS; AIR TESTS
- -PRESSURE TESTS
- -BACTERIOLOGICAL TESTS
- -FIRE FLOW TESTS
- -LIFT STATION START-UP REPORT
- -OTHERS AS MAY BE REQUIRED BY PERMIT OR THE ENGINEER

OSCEOLA COUNTY NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH AND CONFORM TO THE MOST STRINGENT REQUIREMENT OF THE LATEST EDITIONS OF THE FDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION AND OSCEOLA COUNTY ROAD CONSTRUCTION SPECIFICATIONS.
2. THERE SHALL BE NO ROAD CLOSURES WITHOUT PRIOR APPROVAL FROM THE OSCEOLA COUNTY BOARD OF COUNTY COMMISSIONERS. NO OPEN CUTS ALONG ROADWAY ARE ALLOWED UNLESS APPROVED BY COUNTY ENGINEER.
3. UPON APPROVAL OF YOUR PERMIT, THE PROPOSED TTC (TEMPORARY TRAFFIC CONTROL) PLAN IS ACCEPTABLE.
4. ALL UNDERGROUND UTILITIES UNDER THE ROADWAY AND WITHIN 12' OF THE ROADWAY SHALL BE INSTALLED A MINIMUM OF 42", OTHERWISE 30" IS REQUIRED. ALL DIRECTIONAL BORE CASINGS SHALL EXTEND A MINIMUM OF 6' BEYOND THE EDGE OF PAVEMENT.
5. WITHIN 48 HOURS OF BACKFILLING, ALL DISTURBED AREAS SHALL BE RE-GRADED AS NECESSARY TO ASSURE POSITIVE DRAINAGE. IN ADDITION SOD ALL DISTURBED AREAS (NO SEED OR MULCH) WITH SOD OF THE SAME TYPE.
6. ANY PERMITTED PROJECT LASTING OVER 30 DAYS WILL BE RESPONSIBLE TO MAINTAIN THE GRASS WITHIN THE PROJECT LIMITS. GRASS OVER 6" IN HEIGHT WILL BE MOWED.
7. ALL TRENCHES AND HOLES SHALL BE BACKFILLED PER OSCEOLA COUNTY STANDARDS AT THE END OF EVERY WORKDAY. THE ROADWAY/SIDEWALK SHALL BE KEPT CLEAR OF ANY DIRT OR DEBRIS AT ALL TIMES.
8. THE CONTRACTOR SHALL BE REQUIRED TO IMPLEMENT THE BEST MANAGEMENT PRACTICES (BMP'S) AS OUTLINED IN THE FLORIDA STORM WATER EROSION AND SEDIMENT CONTROL INSPECTOR'S MANUAL PUBLISHED BY FDEP ALONG WITH FOLLOWING THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) REGULATIONS AS SET FORTH IN CHAPTER 62.621 OF THE FLORIDA ADMINISTRATIVE CODE.
9. PER M.U.T.C.D., CHAPTER 6, THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN/DESIGN A SAFE BYPASS AT ALL TIMES WHEN THE EXISTING SIDEWALK/PATHWAY IS DISTURBED DURING CONSTRUCTION.
10. ANY DAMAGE TO THE SIDEWALK/ROADWAY/DRIVEWAY SHALL BE REPAIRED TO OSCEOLA COUNTY STANDARDS, AT THE APPLICANTS EXPENSE.
11. WHEN REPLACING SIDEWALKS AT INTERSECTIONS, A CAST IN PLACE DETECTABLE WARNING STRIP IS REQUIRED.
12. ALL PROPOSED PAVEMENT SHALL BE CONSTRUCTED IN COMPLIANCE WITH OSCEOLA COUNTY ROAD SPECIFICATIONS TO INCLUDE ROLLING/RIGID STRAIGHT EDGE TEST AND LEVELING AS NECESSARY.
13. PLACEMENT OF POLE/TERMINAL/HYDRANT/METER/VAULT MUST BE SET AS CLOSE TO RIGHT-OF-WAY LINE AS POSSIBLE. NO POLES/TERMINALS ARE ALLOWED IN THE DITCH BOTTOM OR THE FRONT SLOPE OF DITCH OR WITHIN 1 FOOT OF ANY EXISTING SIDEWALK. WHEN POSSIBLE, ALL UTILITIES SHALL BE PLACED WITHIN A DEDICATED UTILITY EASEMENT.
14. PRIOR TO FINAL ACCEPTANCE, AS-BUILT DRAWINGS ARE REQUIRED AT THE COMPLETION OF PROJECT. THE AS-BUILT SURVEY SHALL INCLUDE ALL NEWLY INSTALLED FACILITIES WITH HORIZONTAL AND VERTICAL LOCATIONS TAKEN AT A MINIMUM 100 FOOT INTERVALS AND AT ALL GRADE BREAKS OR BENDS. ALSO ANY VARIATIONS FROM REQUIRED MATERIAL SIZES OR TYPES SHALL ALSO BE NOTED (DIGITAL COPY OF AS-BUILT SURVEY IN PDF AND AUTOCAD FORMAT). AS-BUILT DRAWINGS SHALL BE SUBMITTED TO THE PUBLIC WORKS PERMITTING DEPARTMENT FOR FINAL ACCEPTANCE.
15. PERMIT IS VALID IN COUNTY RIGHT-OF-WAY ONLY. PLEASE OBTAIN THE NECESSARY PERMISSION/DOCUMENTS/PERMITS FOR WORK OUTSIDE COUNTY RIGHT-OF-WAY OR ENVIRONMENTAL AREAS WHICH INCLUDES: HOA'S, CDD'S, AND ALL PRIVATELY OWNED EASEMENTS.
16. ONLY UNDER EXTREME CIRCUMSTANCES WILL THE COUNTY ALLOW OPEN-CUTS WITHIN ROADWAYS THAT HAVE BEEN RESURFACED OR RECONSTRUCTED WITHIN THE LAST 5 YEARS. THE PERMITTEE WILL BE REQUIRED TO SHOW WRITTEN JUSTIFICATION THAT INCLUDES AN ENGINEERING ANALYSIS OF FACTORS DEMONSTRATING THAT THE MEANS, OTHER THAN THE OPEN-CUT, WILL NOT BE POSSIBLE.
17. ALL EXISTING FACILITIES THAT WILL BE UNOCCUPIED WITHIN THE RIGHT-OF-WAY SHALL BE REMOVED. THE FACILITY SHALL NOT BE ABANDONED AND LEFT IN PLACE.
18. ALL PIPE CULVERTS AND STORM SEWERS SHALL COMPLY WITH SECTION 430 OF THE LATEST EDITION OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
19. THE CONTRACTOR IS REQUIRED TO PROVIDE A WORKSITE TRAFFIC SUPERVISOR IN ACCORDANCE WITH SECTIONS 102 AND 105 OF THE LATEST EDITION OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
20. LOCATE FLAGS TO BE REMOVED WHEN THE JOB IS COMPLETED.
21. ANY SOFT DIG WITHIN 15 FEET OF THE EDGE OF PAVEMENT IS REQUIRED TO BE PROPERLY BACKFILLED WITH EXCAVATABLE FLOWABLE FILL. REFER TO THE ATTACHED TYPICAL TEST HOLE PROCEDURE SHEET.

EARTHWORK QUANTITIES

THE CONTRACTOR SHALL PERFORM HIS OR HER OWN INVESTIGATIONS AND CALCULATIONS AS NECESSARY TO ASSURE THEMSELVES OF EARTHWORK QUANTITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY IMPORT FILL NEEDED, OR FOR REMOVAL AND DISPOSAL OF EXCESS MATERIALS. ALL EARTHWORK SHALL BALANCE ON-SITE, AND, IF NOT BALANCED, A SUMMARY OF QUANTITIES BEING ADDED OR REMOVED FROM THE SITE SHALL BE PROVIDED WITH THE CONSTRUCTION PLANS.

EROSION CONTROL

EROSION AND SILTATION CONTROL MEASURES ARE TO BE PROVIDED AND INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION. THESE MEASURES ARE TO BE INSPECTED BY THE CONTRACTOR ON A REGULAR BASIS AND ARE TO BE MAINTAINED OR REPAIRED ON AN IMMEDIATE BASIS AS REQUIRED. REFER TO WATER MANAGEMENT DISTRICT PERMIT FOR ADDITIONAL REQUIREMENTS FOR EROSION CONTROL AND SURFACE DRAINAGE. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE STABILIZED WITHIN 7 DAYS OF COMPLETION OF CONSTRUCTION. OTHER MATERIALS SHALL BE REVIEW AND APPROVED BY THE CITY.

LIMITS OF DISTURBANCE

AT NO TIME SHALL THE CONTRACTOR DISTURB SURROUNDING PROPERTIES OR TRAVEL ON SURROUNDING PROPERTIES WITHOUT WRITTEN CONSENT FROM THE PROPERTY OWNER. REPAIR OR RECONSTRUCTION OF DAMAGED AREAS ON SURROUNDING PROPERTIES SHALL BE PERFORMED BY THE CONTRACTOR ON AN IMMEDIATE BASIS. ALL COSTS FOR REPAIRS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO EXTRA COMPENSATION SHALL BE PROVIDED. GRADING AND/OR CLEARING ON PROPERTIES OTHER THAN SHOWN ON THE APPROVED PLANS IS PROHIBITED.

TREE REMOVAL

THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ENGINEER WHEN ALL WORK IS LAID OUT (SURVEY STAKED), SO THAT A DETERMINATION MAY BE MADE OF SPECIFIC TREES TO BE REMOVED. NO TREES ON THE CONSTRUCTION PLANS AS BEING SAVED SHALL BE REMOVED WITHOUT PERMISSION FROM THE OWNER, ENGINEER AND THE CITY OF ST. CLOUD.

CLEARING AND GRUBBING

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING AND GRUBBING FOR SITE CONSTRUCTION INCLUDING CLEARING FOR PAVING, UTILITIES, DRAINAGE FACILITIES AND BUILDING CONSTRUCTION. ALL AREAS TO BE CLEARED SHALL BE FIELD STAKED AND REVIEWED BY THE OWNER AND ENGINEER PRIOR TO ANY CONSTRUCTION.

MATERIAL STORAGE/DEBRIS REMOVAL

1) NO COMBUSTIBLE BUILDING MATERIALS MAY BE ACCUMULATED ON THE SITE AND NO CONSTRUCTION WORK INVOLVING COMBUSTIBLE MATERIALS MAY BEGIN UNTIL INSTALLATION OF ALL REQUIRED WATER MAINS AND FIRE HYDRANTS HAVE BEEN COMPLETED, DEP APPROVAL RECEIVED FOR THE WATER MAINS, AND THE HYDRANTS ARE IN OPERATION. CONSTRUCTION WORK INVOLVING NON-COMBUSTIBLE MATERIALS, SUCH AS CONCRETE, MASONRY AND STEEL MAY BEGIN PRIOR TO THE FIRE HYDRANTS BEING OPERATIONAL.

2) ALL MATERIALS EXCAVATED SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE STOCKPILED AT ON-SITE LOCATIONS AS SPECIFIED BY THE OWNER. MATERIALS SHALL BE STOCKPILED SEPARATELY AS TO USABLE (NONORGANIC) FILL STOCKPILES AND ORGANIC (MUCK) STOCKPILES IF MUCK IS ENCOUNTERED. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL UNSUITABLE FILL MATERIALS FROM THE SITE. ALL CLAY ENCOUNTERED SHALL BE EXCAVATED OUT AND REPLACED WITH CLEAN GRANULAR FILL MATERIALS.

FILL MATERIAL

ALL MATERIALS SHALL CONTAIN NO MUCK, STUMPS, ROOTS, BRUSH, VEGATATIVE MATTER, RUBBISH OR OTHER MATERIAL THAT WILL NOT COMPACT INTO A SUITABLE AND ENDURING BACKFILL. FILL SHALL BE CLEAN, NON-ORGANIC, GRANULAR MATERIAL WITH NOT MORE THAN 10% PASSING THE NO. 200 SIEVE.

COMPACTION

FILL MATERIALS PLACED UNDER ROADWAYS SHALL BE COMPACTED TO AT LEAST 98% OF THE MAXIMUM DENSITY AS SPECIFIED IN AASHTO T-180. ALL OTHER FILL AREAS ARE TO BE COMPACTED TO AT LEAST 95% MAXIMUM DENSITY AS SPECIFIED IN AASHTO T-180. FILL MATERIALS SHALL BE PLACED AND COMPACTED IN A MAXIMUM OF 12" LIFTS. THE CONTRACTOR SHALL PROVIDE THE ENGINEER AND OWNER WITH ALL (PASSING AND FAILING) TESTING RESULTS. RESULTS SHALL BE PROVIDED ON A TIMELY AND REGULAR BASIS PRIOR TO CONTRACTOR'S PAY REQUEST SUBMITTAL FOR THE AFFECTED WORK.

PAVEMENT AND/OR ROAD AND RIGHT-OF-WAY WORK

ALL PRESSURE PIPE UNDER ROADWAY SHALL BE DIP EXTENDING 5' FROM EDGE OF PAVEMENT, UNLESS OTHERWISE APPROVED BY THE CITY OF ST. CLOUD AND/OR OSCEOLA COUNTY (AS APPLICABLE).

OWNER/OPERATOR

THE CITY OF ST. CLOUD SHALL OPERATE AND MAINTAIN THE ROADWAYS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE EXPECTED TO MEET ALL CITY REQUIREMENTS.

GENERAL DESIGN INTENT

ALL PAVING SURFACES IN INTERSECTIONS AND ADJACENT SECTIONS SHALL BE GRADED TO DRAIN POSITIVELY IN THE DIRECTION SHOWN BY THE FLOW ARROWS ON THE PLANS AND TO PROVIDE A SMOOTHLY TRANSITIONED DRIVING SURFACE FOR VEHICLES WITH NO SHARP BREAKS INGRADE, AND NO UNUSUALLY STEEP OR REVERSE CROSS SLOPES. APPROACHES TO INTERSECTIONS AND ENTRANCE AND EXIT GRADES TO INTERSECTIONS WILL HAVE TO BE STAKED IN THE FIELD AT DIFFERENT GRADES THAN THE CENTERLINE GRADES TO ACCOMPLISH THE PURPOSES OUTLINED. IN ADDITION, THE STANDARD CROWN WILL HAVE TO BE CHANGED IN ORDER TO DRAIN POSITIVELY IN THE AREA OF INTERSECTIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH THE ABOVE AND THE ENGINEER SHALL BE CONSULTED SO THAT HE MAY MAKE ANY AND ALL REQUIRED INTERPRETATIONS OF THE PLANS OR GIVE SUPPLEMENTARY INSTRUCTION TO ACCOMPLISH THE INTENT OF THE PLANS.

MATERIALS/CONSTRUCTION SPECIFICATIONS

MATERIALS AND CONSTRUCTION METHODS FOR THE ROADWAY CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

PAVEMENT SECTION REQUIREMENTS

CONSTRUCTION OF ROADWAYS WITHIN PROJECT SHALL BE: (A) 10" OF GRUBBED AND STABILIZED BASE COURSE @ 98% OF MAX. DENSITY STABILIZATION, LBR 40 OR FBV 50 PSI THICKNESS, EXTENDED 12" BEYOND PAVEMENT. (B) 6" OF LIMEROCK BASE COURSE @ 98% OF MAX. DENSITY OF AASHTO T-180, LBR 100. (C) 1.5" OF TYPE S-9.5 ASPHALTIC CONCRETE SURFACE COURSE @ 96% OF MAX. LAB DENSITY.

SUBGRADE PREPARATION AND PAVEMENT INSTALLATION SHALL CONFORM TO THE LATEST FDOT STANDARDS AND SOILS REPORT RECOMMENDATIONS.

SIDEWALKS

SIDEWALKS ARE TO BE CONSTRUCTED IN THE AREA AS SHOWN ON THE CONSTRUCTION PLANS. ALL SIDEWALKS NOT ADJACENT TO RESIDENTIAL LOTS SHALL BE CONSTRUCTED WITH THE SITE INFRASTRUCTURE. A SIDEWALK BOND WILL BE REQUIRED AT THE TIME OF FINAL PLAN AND/OR ROAD INFRASTRUCTURE COMPLETION. THE 5' SIDEWALK SHALL BE CONSTRUCTED OF 4 INCHES OF CONCRETE WITH A 28 DAY COMPRESSION STRENGTH OF 3,000 PSI AND FIBER REINFORCEMENT. JOINTS SHALL BE EITHER TOOLED OR SAWCUT AT A DISTANCE OF 5' LENGTHS, HANDICAP RAMPS SHALL BE PROVIDED AT ALL INTERSECTIONS AND BE IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS FOR HANDICAP ACCESSIBILITY.

PAVEMENT MARKINGS/SIGNAGE

PAVEMENT MARKINGS AND SIGNAGE SHALL BE PROVIDED AS SHOWN ON THE CONSTRUCTION PLANS AND SHALL MEET THE REQUIREMENTS OF THE OWNER/OPERATOR. SIGNAGE SHALL BE IN CONFORMANCE WITH MUTCD (LATEST EDITION). A 48-HOUR PAVEMENT CURING TIME WILL BE PROVIDED PRIOR TO APPLICATION OF THE PAVEMENT MARKINGS. REFLECTIVE PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH FDOT STANDARD PLANS INDEX 711-001, LATEST EDITION.

BUILDING MARKINGS

ADDRESS NUMERALS SHALL NOT BE LESS THAN 3 INCHES IN HEIGHT FOR RESIDENTIAL BUILDINGS, STRUCTURES, OR PORTIONS THEREOF, AND AT LEAST SIX INCHES IN HEIGHT FOR ALL OTHER BUILDINGS, STRUCTURES, OR PORTIONS THEREOF. ADDRESS NUMERALS SHALL BE ARABIC NUMERALS OR ALPHABET LETTERS, NO CURSIVE LETTERS.

TRAFFIC CONTROL

A MINIMUM OF 2-WAY, ONE LANE TRAFFIC SHALL BE MAINTAINED IN THE WORK SITE AREA. ALL CONSTRUCTION WARNING SIGNAGE SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. ACCESS SHALL BE CONTINUOUSLY MAINTAINED FOR ALL PROPERTY OWNERS SURROUNDING THE WORK SITE AREA. LIGHTED WARNING DEVICES ARE TO BE OPERATIONAL PRIOR TO DUSK EACH NIGHT DURING CONSTRUCTION.

CURBING

CURBING SHALL BE CONSTRUCTED WHERE NOTED ON THE CONSTRUCTION PLANS. CONCRETE FOR CURBS SHALL BE DEPARTMENT OF TRANSPORTATION CLASS "1" CONCRETE WITH A 28 DAY COMPRESSION STRENGTH OF 3,000 PSI. ALL CURBS SHALL HAVE SAW CUT CONTRACTION JOINTS AND SHALL BE CONSTRUCTED AT INTERVALS NOT TO EXCEED 10'-0" ON CENTER. CONSTRUCTION OF CURBS SHALL BE IN CONFORMANCE WITH THE LATEST EDITION OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. DETAILS PROVIDED ON THE CONSTRUCTION PLANS.

R/W RESTORATION

ALL AREAS WITHIN THE RIGHT-OF-WAYS SHALL BE FINISH GRADED WITH A SMOOTH TRANSITION INTO EXISTING GROUND. ALL SWALES SHALL BE STABILIZED IMMEDIATELY AFTER FINAL GRADING. ALL DISTURBED AREAS SHALL BE RAKED CLEAN OF ALL LIMEROCK AND ROCKS AND SODDED AFTER FINAL GRADING IN ACCORDANCE WITH THE CONSTRUCTION PLANS PRIOR TO FINAL INSPECTION. ALL GRASSING (SEED OR SOD) SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL FINAL ACCEPTANCE BY THE OWNER/OPERATOR.

SITE ACCESS

ALL ACCESS TO THE JOB SITE FOR CONSTRUCTION AND RELATED ACTIVITIES SHALL BE BY EXISTING STREETS AND ROADS,.

GENERAL NOTES:

1. ALL PROPERTY AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN WHAT EXISTED PRIOR TO CONSTRUCTION. THE COST FOR SUCH RESTORATION SHALL BE INCIDENTAL TO OTHER CONSTRUCTION AND NO EXTRA COMPENSATION WILL BE ALLOWED.
2. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL INSTALL EROSION CONTROL DEVICES AT ALL DOWN STREAM INLETS AND SWALES, IN ADDITION TO THE EROSION CONTROL MEASURES SHOWN ON THE EROSION CONTROL PLANS.
3. ALL FILL AREAS TO BE SCARIFIED A MINIMUM DEPTH OF SIX INCHES AND ALL ORGANICS, TRASH AND DEBRIS TO BE REMOVED PRIOR TO THE PLACEMENT OF THE FILL MATERIAL. ALL FILL TO BE PLACED IN 12" MAXIMUM LIFTS AND COMPACTED TO 98% MAX. DENSITY BY A MODIFIED PROCTOR.
4. ALL EARTHWORK OPERATIONS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS, PLANS AND RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER (AS APPLICABLE).
5. ALL COMPACTED BUILDING PAD AREAS TO BE GRADED FLAT AND COMPACTED TO AN ELEVATION THAT IS EIGHT (8) INCHES BELOW THE FINISHED FLOOR. ELEVATIONS SPECIFIED ON THE GRADING PLANS.
6. ALL DRAINAGE FLOW ARROWS SHALL BE RESPECTED SUCH THAT THE FINISHED GRADING RESULTS IN POSITIVE DRAINAGE IN THE DIRECTION INDICATED HEREON UNLESS APPROVED IN WRITING BY THE PROJECT ENGINEER AS AN ACCEPTABLE DEVIATION FROM THIS REQUIREMENT.
7. SOD ENTIRE RIGHT-OF-WAY BETWEEN BACK OF CURB AND SIDEWALK.
8. SOD ALL DISTURBED AREAS WITH SLOPES 5% OR GREATER.
9. SEED & MULCH ALL DISTURBED AREAS UNLESS SPECIFIED TO BE SODDED.
10. WHEN TRENCH EXCAVATION EXCEEDS (5) FIVE IN DEPTH:
    A. CONTRACTOR SHALL CONFORM TO OSHA STD. 29CFR. SECTION 1926.650 WHICH IS INCORPORATED IN FL. STATE 90-96.
    B. THE CONTRACTOR SHALL PROVIDE WRITTEN ASSURANCE OF COMPLIANCE WITH THIS LAW
    C. TRENCH SAFETY SYSTEM SHALL BE DESIGNED BY THE CONTRACTOR.
11. BASE SHALL BE REQUIRED FOR PIPES WITH LESS THAN 20" COVER.
12. ALL DRAINAGE PIPES ARE REINFORCED CONCRETE PIPE, CLASS III, UNLESS OTHERWISE NOTED.
13. DRAINAGE STRUCTURE "RIM" ELEVATION REFERS TO TOP OF FINISHED STRUCTURE.
14. THE CONTRACTOR SHALL ENSURE THAT ALL PERMITS FOR CONSTRUCTION ARE OBTAINED PRIOR TO STARTING WORK. ALL PERMITS SHALL BE PROVIDED TO THE CITY OF ST. CLOUD PRIOR TO STARTING WORK.
15. ALL CONSTRUCTION SHALL CONFORM TO CITY OF ST. CLOUD STANDARDS AND SHALL BE SUBJECT TO FINAL APPROVALS FROM THE CITY PRIOR TO FINAL PAYMENT.
16. THE STORMWATER MANAGEMENT SYSTEM WILL BE OPERATED AND MAINTAINED BY THE OLD HICKORY TREE ESTATES HOMEOWNERS ASSOCIATION.
17. BUILDING HEIGHT SHALL NOT EXCEED 35 FEET.
18. ALL SIDEWALKS NOT ALONG THE ALLEY FRONTED LOTS OR THE RESIDENTIAL LOTS ALONG THE LOCAL STREETS SHALL BE CONSTRUCTED WITH THE SITE INFRASTRUCTURE. A SIDEWALK BOND WILL BE REQUIRED AT TIME OF FINAL PLAT AND / OR ROAD INFRASTRUCTURE COMPLETION.

Know what's below. Call before you dig.

LEGEND

- PROPERTY BOUNDARY LINE
- RIGHT-OF-WAY LINE
- ROADWAY CENTER LINE
- WJL — JURISDICTIONAL WETLAND LINE
- APPROX. EDGE OF WATER LINE
- LANDSCAPE BUFFER LINE
- EASEMENT LINE
- OU — EXISTING OVERHEAD POWER LINE
- SF — SILT FENCE LINE
- SOIL DIVIDE LINE
- EXISTING FENCE LINE
- #" X-WM- EXISTING POTABLE WATER MAIN
- #" WM PROPOSED POTABLE WATER MAIN
- #" X-RM- EXISTING POTABLE WATER MAIN
- #" RM PROPOSED POTABLE WATER MAIN
- EXISTING SANITARY FORCE MAIN
- PROPOSED SANITARY FORCE MAIN
- EXISTING SANITARY SEWER MAIN
- PROPOSED SANITARY SEWER MAIN
- EXISTING STORM DRAINAGE PIPE
- PROPOSED STORM DRAINAGE PIPE
- PRE-DEVELOPMENT DRAINAGE DIVIDE
- POST-DEVELOPMENT DRAINAGE DIVIDE
- SLOPE GRADE BREAK LINE
- 150 — EXISTING GRADE 5' CONTOUR
- EXISTING GRADE 1' CONTOUR
- 150 — PROPOSED GRADE 5' CONTOUR
- PROPOSED GRADE 1' CONTOUR

SYMBOLS

- DITCH BOTTOM INLET
- STORM DRAINAGE MANHOLE
- TYPE 5 CURB INLET
- TYPE 6 CURB INLET
- POTABLE WATER SINGLE SERVICE
- SEWER SINGLE SERVICE
- SANITARY SEWER MANHOLE
- SANITARY LIFT STATION WET WELL
- AIR RELEASE VALVE
- ROADSIDE TRAFFIC SIGN
- MITERED END-SECTION
- ENERGY DISSIPATOR
- U-WALL WITH BAFFLE
- DRAINAGE FLOW ARROW
- POTABLE WATER DOUBLE SERVICE
- SEWER DOUBLE SERVICE
- GATE VALVE
- FIRE HYDRANT
- SOIL BORING LOCATION SW-01

ABBREVIATIONS

99.9FG	PROPOSED FINISHED GRADE ELEVATION
99.9meg	MATCH EXISTING GRADE ELEVATION
99.9TW	PROPOSED TOP OF WALL ELEVATION
99.9+	EXISTING GRADE ELEVATION
FF ELEV. 99.9	PROPOSED FINISHED FLOOR ELEVATION
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
PVI	POINT OF VERTICAL INTERSECTION
BVCS	BEGIN VERTICAL CURVE STATION
EVCS	END VERTICAL CURVE STATION
BVCE	BEGIN VERTICAL CURVE ELEVATION
EVCE	END VERTICAL CURVE ELEVATION
K	VERTICAL CURVE COEFFICIENT
ELEV	ELEVATION
WRA	WATER RETENTION AREA
INT	INTERSECTION
MES	MITERED END SECTION
DBI	DITCH BOTTOM INLET
ROW	RIGHT-OF-WAY
BSL	BUILDING SETBACK LINE
LSB	LANDSCAPE BUFFER
UE	UTILITY EASEMENT
DE	DRAINAGE EASEMENT

NOTE: ALL ELEVATIONS SHOWN ON THESE PLANS ARE NAVD88

REVISION	DATE

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Planning, Design, Permitting, Inspection
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Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

GENERAL NOTES

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
June 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
NONE

SHEET NUMBER
02

EROSION CONTROL PLAN

AN EROSION CONTROL PLAN SHALL BE IMPLEMENTED BY THE CONTRACTOR AND THE CONTRACTOR SHALL EXECUTE ALL MEASURES NECESSARY TO LIMIT THE TRANSPORT OF SEDIMENTS OUTSIDE THE LIMITS OF THE PROJECT TO THE QUANTITIES AND CONDITIONS THAT EXIST PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THIS CONDITION WILL BE SATISFIED FOR THE TOTAL ANTICIPATED CONSTRUCTION PERIOD. PROVISIONS SHALL BE MADE TO PRESERVE THE INTEGRITY AND CAPACITY OF STORMWATER INLETS, SEDIMENT BASINS, SLOPE DRAINS, GRADING PATTERNS, ETC. REQUIRED TO MEET THIS PROVISION THROUGHOUT THE LIFE OF THE CONSTRUCTION OF THE PROJECT. CONTRACTOR SHALL PROVIDE HAY BAILS, SILT BARRIERS, TEMPORARY GRASSING, ETC. AS REQUIRED TO FULLY COMPLY WITH THE INTENT OF THIS SPECIFICATION. UPON COMPLETION OF CONSTRUCTION AND COMPLETED STABILIZATION OF POTENTIAL EROSION AREAS, THE CONTRACTOR SHALL REMOVE SEDIMENTATION CONTROL MEASURES AND CLEAN AND REPAIR ANY AREAS AFFECTED BY THE CONSTRUCTION ACTIVITIES.

STOCKPILING MATERIAL

NO EXCAVATED MATERIAL SHALL BE STOCKPILED SO AS TO DIRECT STORMWATER OFF THE PROJECT SITE OR INTO ANY ADJACENT WATER BODY OR STORMWATER COLLECTION SYSTEM. EXCAVATED MATERIAL SHALL NOT BE STOCKPILED SO AS TO WASHOUT AND CAUSE SEDIMENTATION OF ANY DOWN-STREAM DRAINAGE STRUCTURES OR WATER BODIES.

MAINTENANCE

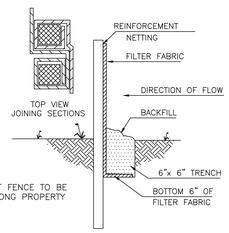
ALL FEATURES OF THE PROJECT SHALL BE CONSTRUCTED TO PREVENT EROSION AND SEDIMENTATION AND SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION PROPERLY WITHOUT THE TRANSPORT OF SEDIMENTS OUTSIDE THE LIMITS OF THE PROJECT. ANY SEDIMENT ACCUMULATIONS IN THE DRAINAGE SYSTEM SHALL BE REMOVED AND THE SYSTEM RESTORED TO ORIGINAL SPECIFICATIONS PRIOR TO THE COMPLETION AND FINAL APPROVAL OF THE PROJECT. UPON FINAL APPROVAL AND COMPLETION OF CONSTRUCTION, MAINTENANCE RESPONSIBILITIES MAY BE TRANSFERRED TO AN APPROVED ENTITY.

SOILS LEGEND

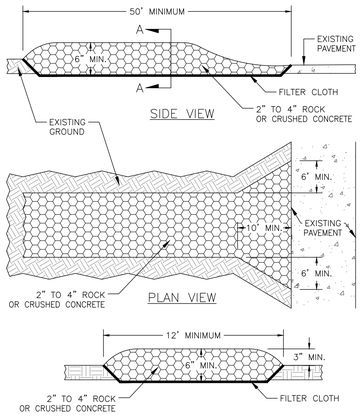
ID	DESCRIPTION	HSG
6	BASINGER FINE SAND, DEPRESSIONAL, 0-1% SLOPES	D
24	NARCOOSSEE FINE SAND, 0-2% SLOPES	A
42	SMYRNA FINE SAND, 0-2% SLOPES	D

TREES LEGEND

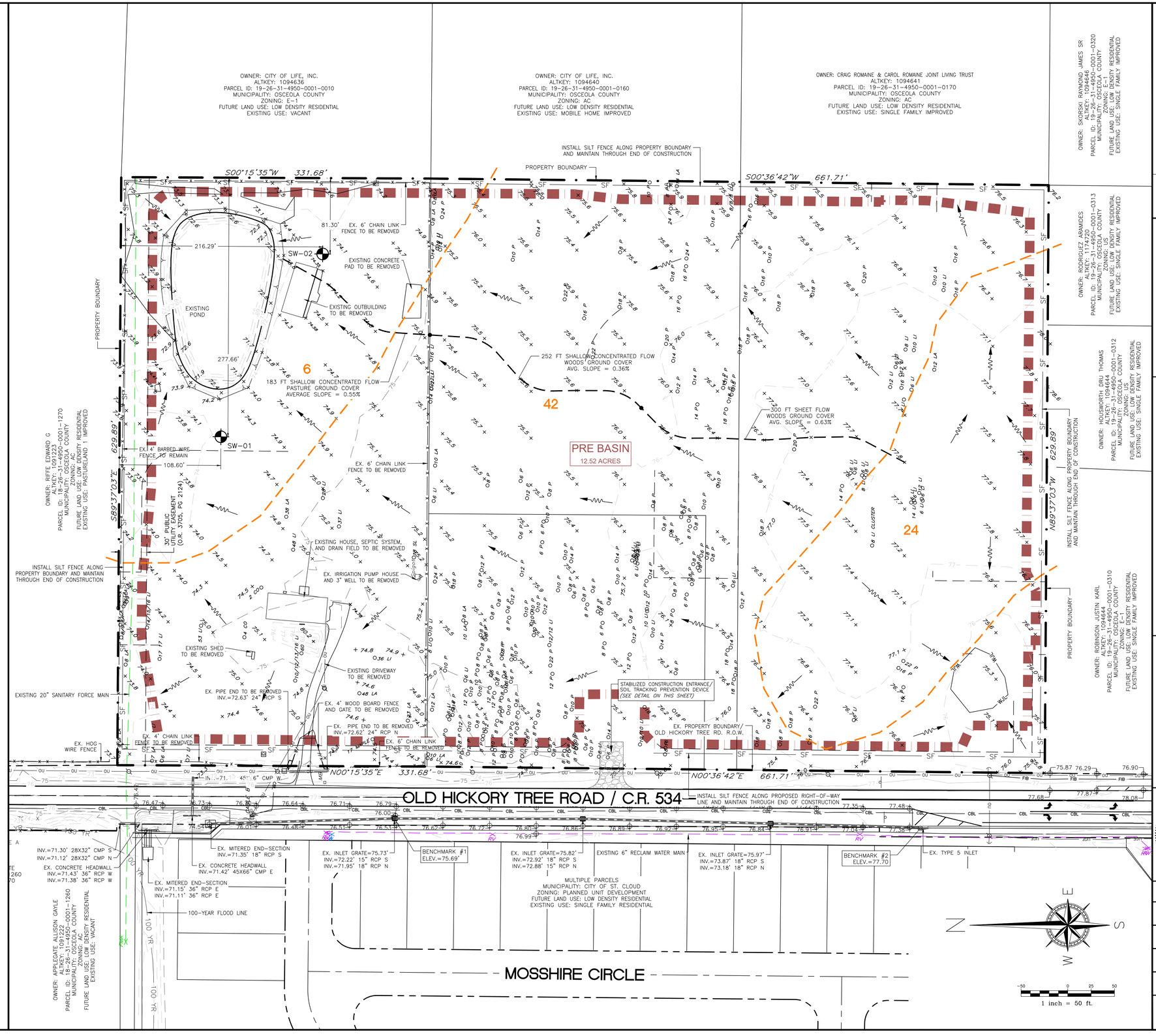
ID	DESCRIPTION
CO	COCONUT PALM
LA	LAUREL OAK (DIAMOND OAK)
SL	SLASH PINE
LI	LIVE OAK
MAPLE	FLORIDA MAPLE
P	LONGLEAF PINE



SILT FENCE DETAIL
N.T.S



SOIL TRACKING PREVENTION DEVICE
NOT TO SCALE



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Revised per TVA comments dated Feb. 3, 2025	Mar. 2025

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OLD HICKORY TREE ESTATES

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OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

PRE-DEVELOPMENT EROSION AND DUST ABATEMENT PLAN

THOMAS L. KNIGHT, LICENSE No. 47614, STATE OF FLORIDA, PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
June 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
1" = 50'

SHEET NUMBER
03



REVISION	DATE

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AERIAL OVERLAY PLAN

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
June 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
1" = 50'

SHEET NUMBER
04

PROJECT CHARACTERISTICS:

ALTERNATE KEYS	1094637 1094639 1094638 1094642
PARCEL IDS	19-26-31-4950-0001-0020 19-26-31-4950-0001-0155 19-26-31-4950-0001-0150 19-26-31-4950-0001-0180
MUNICIPALITY	CITY OF ST. CLOUD
EXISTING USE	SINGLE FAMILY/VACANT RESIDENTIAL
ZONING	PLANNED UNIT DEVELOPMENT (PUD)
FUTURE LAND USE	MEDIUM DENSITY RESIDENTIAL (MDR)
GROSS PROPERTY AREA	625,717.87 SQ. FT.; 14.36 ACRES
R.O.W. DEDICATED TO OLD HICKORY TREE RD.	0.27 ACRES
PROJECT AREA	613,798.58 SQ. FT.; 14.09 ACRES
TOTAL NUMBER OF UNITS	54
MAXIMUM GROSS DENSITY	10 D.U./AC.
PROPOSED GROSS DENSITY	3.76 D.U./AC.
REQUIRED OPEN SPACE	20.00% (125,143 SF/2.87 ACRES)
PROVIDED OPEN SPACE	30.06% (188,070 SF/4.32 ACRES)
MAXIMUM BUILDING HEIGHT	35 FEET
MAXIMUM LOT COVERAGE	65.00%

LANDSCAPE BUFFERS:

NORTH	15 FEET
SOUTH	15 FEET
EAST	15 FEET
WEST	15 FEET

AREAS TABLE:

ID	LAND USE (TYPE)	AREA (AC.)	AREA (SQ. FT.)	% OF SITE
LOTS	RESIDENTIAL AREA	6.55	285,614.60	45.61%
R.O.W.	PUBLIC RIGHT-OF-WAY	3.41	148,433.13	23.75%
TRACT A	OPEN SPACE (BUFFER)	0.31	13,575.01	2.16%
TRACT B	OPEN SPACE (BUFFER)	0.31	13,618.30	2.16%
TRACT C	OPEN SPACE (STORMWATER, REC.)	3.05	132,715.39	21.24%
TRACT D	OPEN SPACE (AMENITY AREA)	0.32	13,750.00	2.23%
TRACT E	OPEN SPACE (BUFFER)	0.33	14,411.44	2.30%
TRACT F	PUBLIC UTILITY (LIFT STATION)	0.08	3,600.00	0.56%
TOTAL		14.36	625,717.87	

OPEN SPACE TABLE:

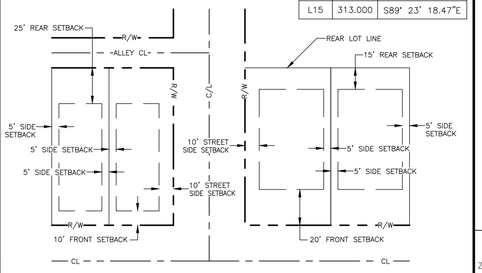
ID	TYPE	USES	ALLOW. AREA SQ.FT.	(AC.)	% OF REQ'D OS.	TOTAL AREA SQ.FT.	(AC)	% OF TOTAL OS.
TRACT A	BUFFER	LANDSCAPE	13,575	(0.31)	10.85%	13,575	(0.31)	7.22%
TRACT B	BUFFER	LANDSCAPE	13,618	(0.31)	10.88%	13,618	(0.31)	7.24%
TRACT C	BUFFER/AMENITY	LANDSCAPE/REC TRAIL	41,009	(0.94)	32.77%	41,009	(0.94)	21.81%
TRACT C	STORMWATER	WDA, REC TRAIL	28,781	(0.66)	22.99%	91,707	(2.10)	48.76%
TRACT D	AMENITY AREA	ACTIVE RECREATION	13,750	(0.32)	10.99%	13,750	(0.32)	7.31%
TRACT E	BUFFER	LANDSCAPE	14,411	(0.33)	11.52%	14,411	(0.33)	7.66%
		TOTALS	125,144	(2.87)	100.00%	188,070	(4.32)	100.00%

PARKING REQUIREMENTS (PER LDC SECTION 4.2.1)

RESIDENTIAL OFF-STREET:	4 SPACES PER UNIT	x 54 LOTS	=216
RESIDENTIAL ON-STREET:	1 SPACE PER 2 DWELLING UNITS	x 54 LOTS	= 27
RECREATION (OUTDOOR) ON-STREET:	1 SPACE PER 1,000 SQ. FT. / 13,750 SQ. FT.		= 14
	TOTAL SPACES REQUIRED (OFF-STREET)		=216
	(ON-STREET)		= 41
			257
TOTAL PARKING SPACES PROVIDED (OFF-STREET)			=216
TOTAL PARKING SPACES PROVIDED (ON-STREET)			= 43
			=259

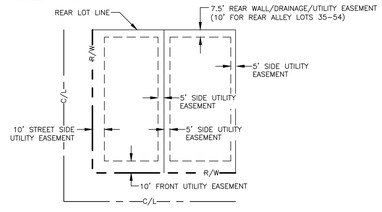
CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	94.248	60.000	090°00'00"
C2	32.201	20.500	090°00'00"
C3	39.270	25.000	090°00'00"
C4	39.270	25.000	090°00'00"
C5	15.708	10.000	090°00'00"
C6	3.001	85.000	002°01'21"
C7	47.896	85.000	032°17'07"
C8	61.401	85.000	041°23'19"
C9	21.220	85.000	014°18'13"
C10	48.695	31.000	090°00'00"
C11	39.270	25.000	090°00'00"

LINE TABLE		
LINE	LENGTH	DIRECTION
L1	194.118	S89° 23' 18.47"E
L2	153.500	S89° 23' 18.47"E
L3	99.500	S89° 23' 18.47"E
L4	93.500	S00° 36' 41.53"W
L5	153.500	S00° 36' 41.53"W
L6	44.367	S00° 36' 41.53"W
L7	485.500	S00° 36' 41.53"W
L8	153.500	S00° 36' 41.53"W
L9	153.500	S00° 36' 41.53"W
L10	156.523	S00° 36' 41.53"W
L11	154.881	N89° 23' 18.47"W
L12	313.000	N89° 23' 18.47"W
L13	465.000	N00° 36' 41.53"E
L14	133.000	N89° 23' 18.47"W
L15	313.000	S89° 23' 18.47"E

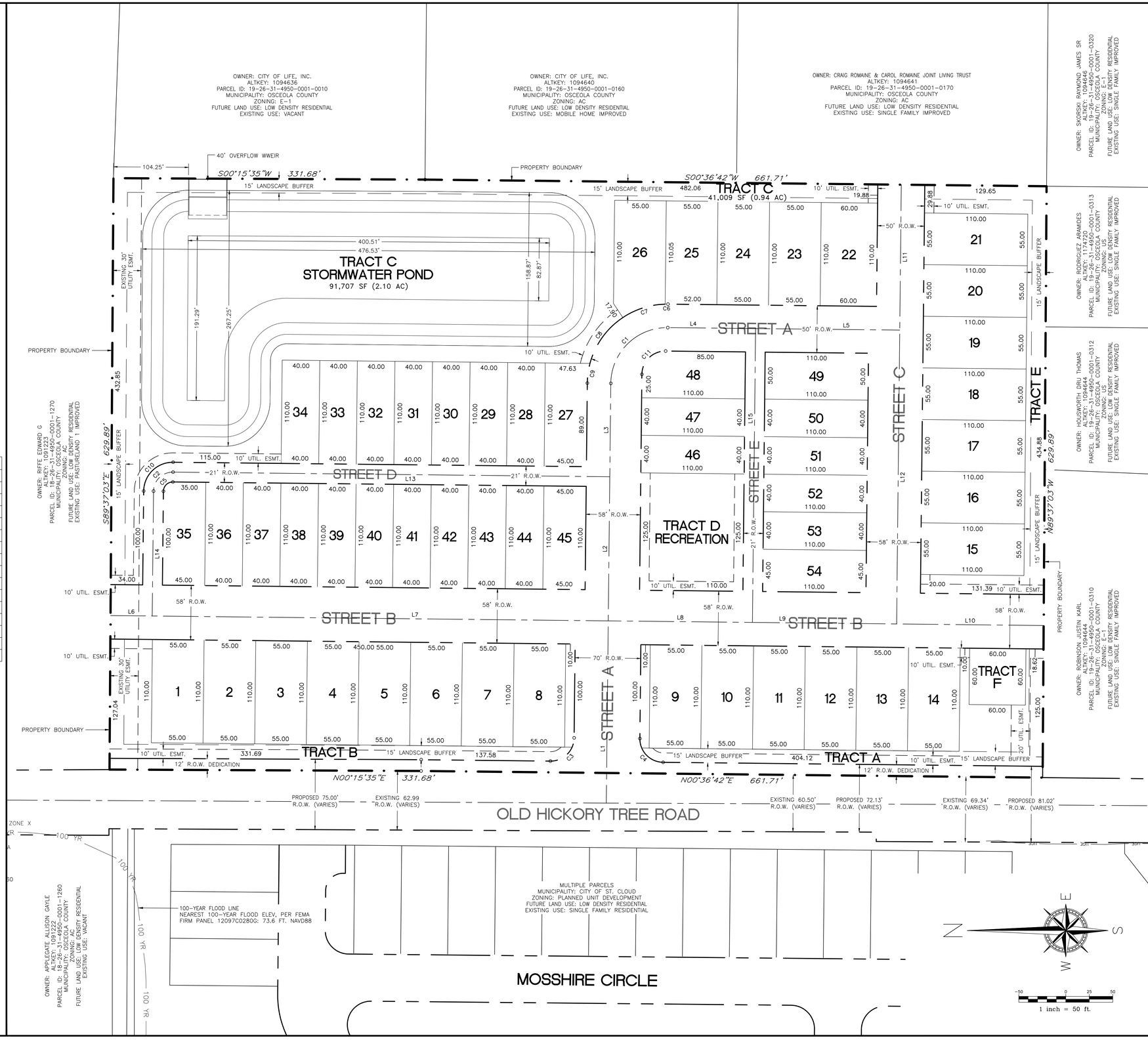


TYPICAL 40' LOT DWELLING SETBACKS
SCALE 1" = 50'

TYPICAL 55' LOT DWELLING SETBACKS
SCALE 1" = 50'



TYPICAL LOT EASEMENTS
NOT TO SCALE



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OLD HICKORY TREE ESTATES

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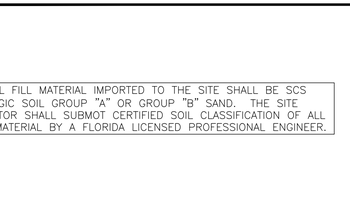
GEOMETRY PLAN

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE	June 2025
DRAWN BY	TLK/JMK
PROJECT NUMBER	23-12
SCALE	1" = 50'
SHEET NUMBER	05

NOTE: ALL FILL MATERIAL IMPORTED TO THE SITE SHALL BE SCS HYDROLOGIC SOIL GROUP "A" OR GROUP "B" SAND. THE SITE CONTRACTOR SHALL SUBMOT CERTIFIED SOIL CLASSIFICATION OF ALL IMPORT MATERIAL BY A FLORIDA LICENSED PROFESSIONAL ENGINEER.

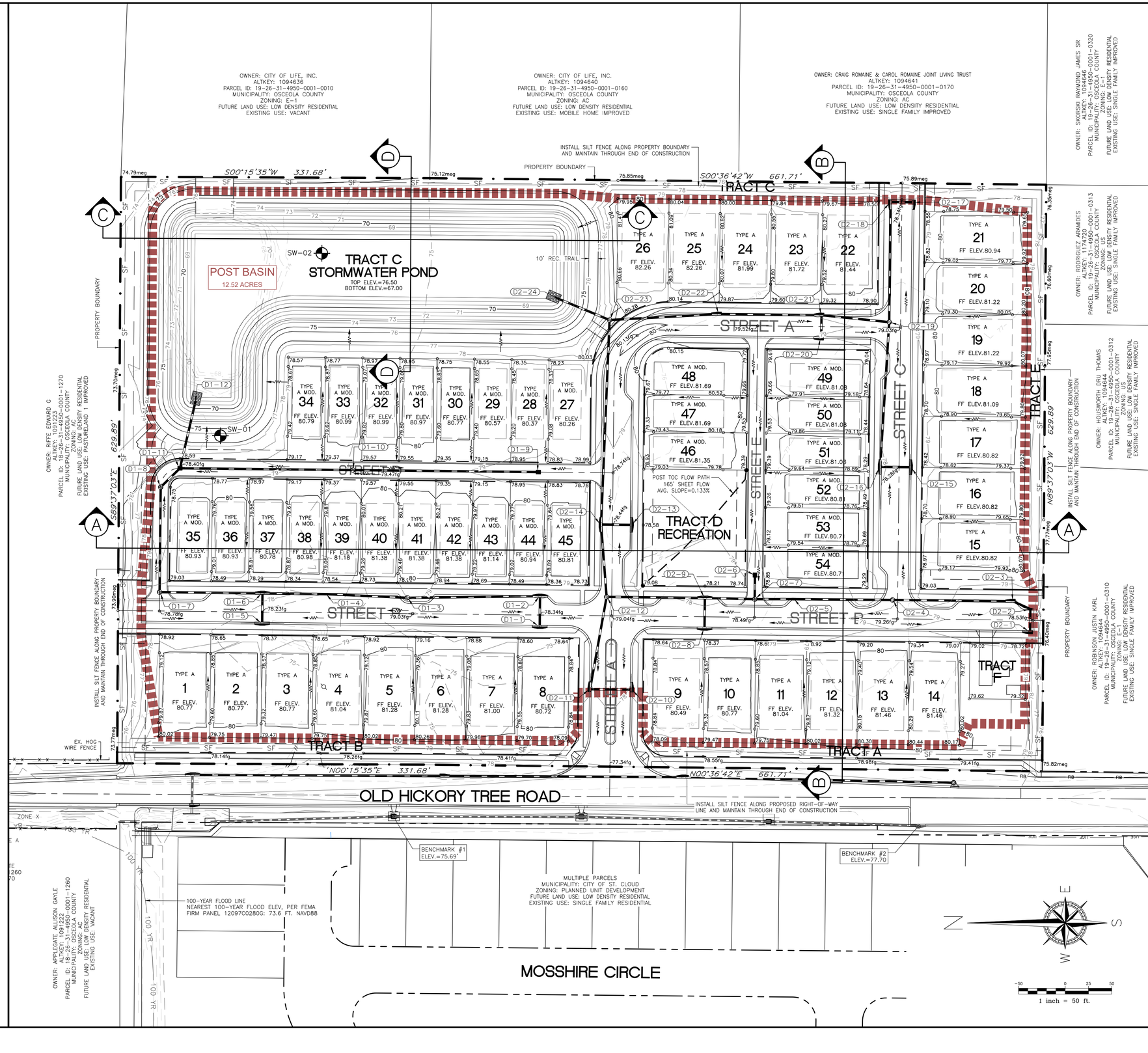


TYPE A

TYPE A MODIFIED

TYPE C MODIFIED

TYPICAL LOT GRADING DETAIL
NOT TO SCALE



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225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

GRADING AND DRAINAGE PLAN

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
June 2025

DRAWN BY
TLK/JMK

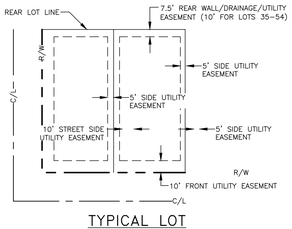
PROJECT NUMBER
23-12

SCALE
1" = 50'

SHEET NUMBER
06

SANITARY STRUCTURE TABLE

ID:	DETAILS:	PIPES IN:	PIPES OUT
S-1	4' MH RIM = 79.32	INV IN 6"(NE)=74.01' | FROM LAT'L	INV OUT 8"(S)=73.84 | 310.3' OF 8" SDR35 @ 0.40% TO S-2
S-2	4' MH RIM = 78.69	INV IN 8"(N)=72.60' | FROM S-1	INV OUT 8"(E)=72.50 | 119.1' OF 8" SDR35 @ 0.40% TO S-3
S-3	4' MH RIM = 79.99	INV IN 8"(W)=72.02' | FROM S-2	INV OUT 8"(SE)=71.90 | 47.3' OF 8" SDR35 @ 0.40% TO S-4
S-4	4' MH (POLYMER CONCRETE) RIM = 80.02	INV IN 8"(NW)=71.71' | FROM S-3	INV OUT 8"(S)=71.60 | 264.5' OF 8" SDR35 @ 0.40% TO S-6
S-5	4' MH (POLYMER CONCRETE) RIM = 78.75	INV IN 6"(SE)=74.05' | FROM LAT'L	INV OUT 8"(W)=73.88 | 60.8' OF 8" SDR35 @ 1.00% TO S-6
S-6	5' DROP MH RIM = 79.00	INV IN 8"(N)=70.54' | FROM S-4 INV IN 8"(E)=73.27' | FROM S-5	INV OUT 8"(W)=70.40 | 308.0' OF 8" SDR35 @ 0.52% TO S-9
S-7	4' MH RIM = 78.43	INV IN 6"(NE)=71.97' | FROM LAT'L INV IN 6"(NW)=71.97' | FROM LAT'L	INV OUT 8"(S)=71.81 | 351.4' OF 8" SDR35 @ 0.40% TO S-8
S-8	4' MH RIM = 78.41	INV IN 8"(N)=70.40' | FROM S-7	INV OUT 8"(S)=70.30 | 376.0' OF 8" SDR35 @ 0.40% TO S-9
S-9	4' MH (POLYMER CONCRETE) RIM = 79.24	INV IN 8"(N)=68.80' | FROM S-8 INV IN 8"(E)=68.80' | FROM S-6	INV OUT 8"(S)=68.70 | 78.5' OF 8" SDR35 @ 0.40% TO S-10
S-10	4' MH (POLYMER CONCRETE) RIM = 78.73	INV IN 8"(N)=68.39' | FROM S-9	INV OUT 8"(W)=68.29 | 49.5' OF 8" SDR35 @ 0.40% TO S-11
S-11	5' MH (POLYMER CONCRETE) RIM = 79.60	INV IN 8"(E)=68.09' | FROM S-10	INV OUT 10"(S)=67.99 | 24.7' OF 10" DR-11 HDPE @ 1.00% TO WW-1
WW-1	8' WW (POLYMER CONCRETE) RIM = 80.00	INV IN 10"(N)=67.74' | FROM S-11	
XS-1	5' MH (INSTALL LINER PER TWA SPECS) RIM = 76.47	INV IN 8"(S)=62.93' | FROM EX. MH INV IN 8"(N)=63.13' | FROM EX. MH INV IN 4"(NE)=63.15' | FROM FM	INV OUT 8"(W)=62.75 | 13.8' OF 8" DIP @ 0.40% TO EX. MH

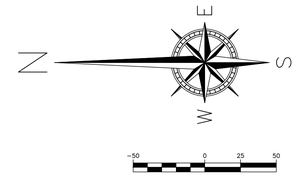


TYPICAL LOT EASEMENTS

NOT TO SCALE

UTILITY NOTES:

1. THE PROJECT WILL BE SERVED BY A CENTRAL SEWER SYSTEM, A CENTRAL POTABLE WATER SYSTEM, AND A CENTRAL RECLAIMED WATER SYSTEM
2. THE PROPOSED 4" SANITARY SEWER FORCE MAIN SHALL CONNECT, VIA CORE DRILL, TO THE EXISTING MANHOLE LOCATED APPROXIMATELY 800 FEET SOUTHWEST OF THE PROJECT ENTRANCE AT THE INTERSECTION OF GRAMERCY FARMS BLVD AND MOSSHIRE CIRCLE
3. FOR DOUBLE AND SINGLE SANITARY SERVICES TOHO WATER AUTHORITY'S MAINTENANCE RESPONSIBILITY SHALL END AT THE SINGLE 6" RISER AT THE PROPERTY LINE.
4. THE PROPOSED 8" POTABLE WATER MAIN SHALL CONNECT TO THE EXISTING 16" POTABLE WATER MAIN LOCATED APPROXIMATELY 700 FEET SOUTH OF THE PROJECT ENTRANCE AT THE INTERSECTION OF OLD HICKORY TREE ROAD AND GRAMERCY FARMS BLVD. AND TO THE EXISTING 8" POTABLE WATER MAIN LOCATED APPROXIMATELY 300 FEET NORTH OF THE PROJECT ENTRANCE, WITHIN MOSSHIRE CIRCLE RIGHT-OF-WAY (SEE PLAN).
5. THE PROPOSED 8" RECLAIMED WATER MAIN SHALL CONNECT TO THE EXISTING 24" RECLAIMED WATER MAIN LOCATED APPROXIMATELY 700 FEET SOUTH OF THE PROJECT ENTRANCE AT THE INTERSECTION OF OLD HICKORY TREE ROAD AND GRAMERCY FARMS BLVD. AND TO THE EXISTING 8" RECLAIMED WATER MAIN LOCATED APPROXIMATELY 1,000 FEET NORTH OF THE PROJECT ENTRANCE ON OLD HICKORY TREE RD.
6. ALL UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH APPLICABLE REQUIREMENTS OF THE CITY OF ST. CLOUD, TOHO WATER AUTHORITY (TWA) AND FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP)
7. THE RECLAIMED WATER SYSTEM SHALL HAVE NEVER BEEN WETTED WITH ANY TYPE OF NON-POTABLE WATER AND SHALL HAVE NEVER BEEN PREVIOUSLY USED TO CARRY FLOWS ASIDE FROM POTABLE WATER
8. ALL PURPLE PIPES CONSTRUCTED AS PART OF THE RECLAIMED WATER SYSTEM SHALL NEVER BE USED TO CONVEY DRINKING WATER AT ANY TIME IN THE FUTURE
9. ALL POTABLE WATER PIPES SHALL BE COLOR CODED BLUE, ALL RECLAIMED WATER PIPES SHALL BE COLOR CODED PURPLE AND ALL SANITARY SEWER PIPES SHALL BE COLOR CODED GREEN
10. WATER SERVICES 2" AND SMALLER SHALL UTILIZE A DOUBLE STRAP TAPPING SADDLE, A CORPORATION STOP, AND BLUE PE TUBING. NO FITTINGS ALLOWED BETWEEN CORP. STOP AND CURB STOP.
11. REUSE SERVICES 2" AND SMALLER SHALL UTILIZE A DOUBLE STRAP TAPPING SADDLE, A CORPORATION STOP, AND PURPLE PE TUBING. NO FITTINGS ALLOWED BETWEEN CORP. STOP AND CURB STOP.
12. ALL PROPOSED LANDSCAPING SHALL MAINTAIN 5 FEET HORIZONTAL SEPARATION FROM THE ROOT BALL OF TREES TO TOHO MAINTAINED UTILITIES.
13. ALL PROPOSED POLES (SIGN, TRAFFIC, LIGHT, ETC.) SHALL MAINTAIN A 6-FOOT MINIMUM, 10-FOOT PREFERRED, HORIZONTAL SEPARATION FROM TOHO MAINTAINED UTILITIES.
14. PERMANENT STRUCTURES SHALL MAINTAIN A MINIMUM 15 FEET OF HORIZONTAL SEPARATION FROM TOHO MAINTAINED UTILITIES.



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Revised per TWA comments dated Feb. 3, 2025	Mar. 2025

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Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

MASTER UTILITY PLAN

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
June 2025

DRAWN BY
TLK/JMK

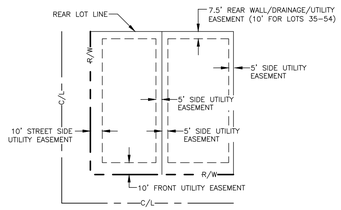
PROJECT NUMBER
23-12

SCALE
1" = 50'

SHEET NUMBER
07

UTILITY NOTES:

1. THE PROJECT WILL BE SERVED BY A CENTRAL SEWER SYSTEM, A CENTRAL POTABLE WATER SYSTEM, AND A CENTRAL RECLAIMED WATER SYSTEM
2. THE PROPOSED 4" SANITARY SEWER FORCE MAIN SHALL CONNECT, VIA CORE DRILL, TO THE EXISTING MANHOLE LOCATED APPROXIMATELY 800 FEET SOUTHWEST OF THE PROJECT ENTRANCE AT THE INTERSECTION OF GRAMERCY FARMS BLVD AND MOSSHIRE CIRCLE
3. FOR DOUBLE AND SINGLE SANITARY SERVICES TOHO WATER AUTHORITY'S MAINTENANCE RESPONSIBILITY SHALL END AT THE SINGLE 6" RISER AT THE PROPERTY LINE.
4. THE PROPOSED 8" POTABLE WATER MAIN SHALL CONNECT TO THE EXISTING 16" POTABLE WATER MAIN LOCATED APPROXIMATELY 700 FEET SOUTH OF THE PROJECT ENTRANCE AT THE INTERSECTION OF OLD HICKORY TREE ROAD AND GRAMERCY FARMS BLVD. AND TO THE EXISTING 8" POTABLE WATER MAIN LOCATED APPROXIMATELY 300 FEET NORTH OF THE PROJECT ENTRANCE, WITHIN MOSSHIRE CIRCLE RIGHT-OF-WAY (SEE PLAN).
5. THE PROPOSED 8" RECLAIMED WATER MAIN SHALL CONNECT TO THE EXISTING 24" RECLAIMED WATER MAIN LOCATED APPROXIMATELY 700 FEET SOUTH OF THE PROJECT ENTRANCE AT THE INTERSECTION OF OLD HICKORY TREE ROAD AND GRAMERCY FARMS BLVD. AND TO THE EXISTING 8" RECLAIMED WATER MAIN LOCATED APPROXIMATELY 1,000 FEET NORTH OF THE PROJECT ENTRANCE ON OLD HICKORY TREE RD.
6. ALL UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH APPLICABLE REQUIREMENTS OF THE CITY OF ST. CLOUD, TOHO WATER AUTHORITY (TWA) AND FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP)
7. THE RECLAIMED WATER SYSTEM SHALL HAVE NEVER BEEN WETTED WITH ANY TYPE OF NON-POTABLE WATER AND SHALL HAVE NEVER BEEN PREVIOUSLY USED TO CARRY FLOWS ASIDE FROM POTABLE WATER
8. ALL PURPLE PIPES CONSTRUCTED AS PART OF THE RECLAIMED WATER SYSTEM SHALL NEVER BE USED TO CONVEY DRINKING WATER AT ANY TIME IN THE FUTURE
9. ALL POTABLE WATER PIPES SHALL BE COLOR CODED BLUE, ALL RECLAIMED WATER PIPES SHALL BE COLOR CODED PURPLE AND ALL SANITARY SEWER PIPES SHALL BE COLOR CODED GREEN
10. WATER SERVICES 2" AND SMALLER SHALL UTILIZE A DOUBLE STRAP TAPPING SADDLE, A CORPORATION STOP, AND BLUE PE TUBING. NO FITTINGS ALLOWED BETWEEN CORP. STOP AND CURB STOP.
11. REUSE SERVICES 2" AND SMALLER SHALL UTILIZE A DOUBLE STRAP TAPPING SADDLE, A CORPORATION STOP, AND PURPLE PE TUBING. NO FITTINGS ALLOWED BETWEEN CORP. STOP AND CURB STOP.
12. ALL PROPOSED LANDSCAPING SHALL MAINTAIN 5 FEET HORIZONTAL SEPARATION FROM THE ROOT BALL OF TREES TO TOHO MAINTAINED UTILITIES.
13. ALL PROPOSED POLES (SIGN, TRAFFIC, LIGHT, ETC.) SHALL MAINTAIN A 6-FOOT MINIMUM, 10-FOOT PREFERRED, HORIZONTAL SEPARATION FROM TOHO MAINTAINED UTILITIES.
14. PERMANENT STRUCTURES SHALL MAINTAIN A MINIMUM 15 FEET OF HORIZONTAL SEPARATION FROM TOHO MAINTAINED UTILITIES.



TYPICAL LOT EASEMENTS
NOT TO SCALE

OWNER: CITY OF LIFE, INC.
ALTKEY: 1094636
PARCEL ID: 19-26-31-4950-0001-0010
MUNICIPALITY: OSCEOLA COUNTY
ZONING: E-1
FUTURE LAND USE: LOW DENSITY RESIDENTIAL
EXISTING USE: VACANT

OWNER: CITY OF LIFE, INC.
ALTKEY: 1094640
PARCEL ID: 19-26-31-4950-0001-0160
MUNICIPALITY: OSCEOLA COUNTY
ZONING: AC
FUTURE LAND USE: LOW DENSITY RESIDENTIAL
EXISTING USE: MOBILE HOME IMPROVED

OWNER: CRAIG ROMAINE & CAROL ROMAINE JOINT LIVING TRUST
ALTKEY: 1094641
PARCEL ID: 19-26-31-4950-0001-0170
MUNICIPALITY: OSCEOLA COUNTY
ZONING: AC
FUTURE LAND USE: LOW DENSITY RESIDENTIAL
EXISTING USE: SINGLE FAMILY IMPROVED

OWNER: SKORSKI, RAYMOND JAMES SR
ALTKEY: 1094646
PARCEL ID: 19-26-31-4950-0001-0320
MUNICIPALITY: OSCEOLA COUNTY
ZONING: E-1
FUTURE LAND USE: LOW DENSITY RESIDENTIAL
EXISTING USE: SINGLE FAMILY IMPROVED

OWNER: RODRIGUEZ, ARAMIDES
ALTKEY: 1174720
PARCEL ID: 19-26-31-4950-0001-0313
MUNICIPALITY: OSCEOLA COUNTY
ZONING: US
FUTURE LAND USE: LOW DENSITY RESIDENTIAL
EXISTING USE: SINGLE FAMILY IMPROVED

OWNER: HOUSWORTH DRU THOMAS
ALTKEY: 1094644
PARCEL ID: 19-26-31-4950-0001-0312
MUNICIPALITY: OSCEOLA COUNTY
ZONING: US
FUTURE LAND USE: LOW DENSITY RESIDENTIAL
EXISTING USE: SINGLE FAMILY IMPROVED

OWNER: ROBINSON, JUSTIN KARL
ALTKEY: 1094644
PARCEL ID: 19-26-31-4950-0001-0310
MUNICIPALITY: OSCEOLA COUNTY
ZONING: E-1
FUTURE LAND USE: LOW DENSITY RESIDENTIAL
EXISTING USE: SINGLE FAMILY IMPROVED

OWNER: RIFFE, EDWARD G
ALTKEY: 1091223
PARCEL ID: 13-26-31-4950-0001-1270
MUNICIPALITY: OSCEOLA COUNTY
ZONING: AC
FUTURE LAND USE: LOW DENSITY RESIDENTIAL
EXISTING USE: PASTURELAND 1 IMPROVED

OWNER: APPLEGATE ALLISON GAYLE
ALTKEY: 1091222
PARCEL ID: 13-26-31-4950-0001-1260
MUNICIPALITY: OSCEOLA COUNTY
ZONING: AC
FUTURE LAND USE: LOW DENSITY RESIDENTIAL
EXISTING USE: VACANT

PROPERTY BOUNDARY
S00°15'35"W 331.68'
S89°37'03"E 629.89'
N00°15'35"E 331.68'
S00°36'42"W 661.71'
N89°37'03"W 629.89'
N00°36'42"E 661.71'
EXISTING 30' UTILITY ESMT.
EXIST. 20' FM
TRACT C
STORMWATER POND
TRACT D
RECREATION
TRACT E
TRACT
TRACT A
TRACT B
STREET A
STREET B
STREET C
STREET D
STREET E
OLD HICKORY TREE ROAD
MOSSHIRE CIRCLE
4" G.V. AND CAP WITH 2" BLOW-OFF
8" G.V. AND CAP WITH 2" BLOW-OFF
4"TEE (2)4"G.V.s (N,W)
4"G.V.
8"TEE (3)8"G.V.s (N,E,W)
FIRE HYDRANT
8"x6"TEE (2)8"G.V.s (E,W) 6"G.V. (N)
4"TEE (2) 4"G.V. (E&N)
4"TEE (2) 4"G.V. (S&E)
4"TEE (2)4"G.V.s (E,S)
4"TEE (2)4"G.V.s (N,E)
8"x6"TEE 8"G.V. (S) 6"G.V.(E)
8" CROSS; (4)8"G.V.s (N,S,E,W)
8"TEE (3)8"G.V.s (N,E,S)
(2) 45° BENDS
8" DIA. LIFT STATION WITH ODOR CONTROL UNIT
MONITORING METER AND RPZ BACKFLOW PREVENTER
8"x4" TEE; (2) 8" G.V. (N&S) 4" G.V. (E)
8"G.V.
8" TEE; (3) 8" G.V.s (N,S,W)
2" BLOW-OFF 8" G.V.
8" TEE; (3) 8" G.V. (N,E,S)
EXISTING 6" RECLAIM WATER MAIN
REFER TO OFFSITE UTILITY SHEET FOR OFFSITE UTILITY INFORMATION
EX. HOG WIRE FENCE
10' U.E.
20' U.E.
6"G.V.
4"G.V.
8"WM
4"RM
8"SS
6"WM
OU
UGT
CBL
FIB
ZONE X
100 YR
100-YEAR FLOOD LINE
NEAREST 100-YEAR FLOOD ELEV, PER FEMA FIRM PANEL 12097C0280G: 73.6 FT. NAVD88
POTABLE WATER P.O.C. #2
CONNECT TO EXISTING 8" POTABLE MAIN
INSTALL TEMPORARY JUMPER CONNECTION
MULTIPLE PARCELS
MUNICIPALITY: CITY OF ST. CLOUD
ZONING: PLANNED UNIT DEVELOPMENT
FUTURE LAND USE: LOW DENSITY RESIDENTIAL
EXISTING USE: SINGLE FAMILY RESIDENTIAL
N
E
S
W
-50 0 25 50
1 inch = 50 ft.

REVISION	DATE
Revised per TWA comments dated Feb. 3, 2025	Mar. 2025

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

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OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

UTILITY PLAN

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

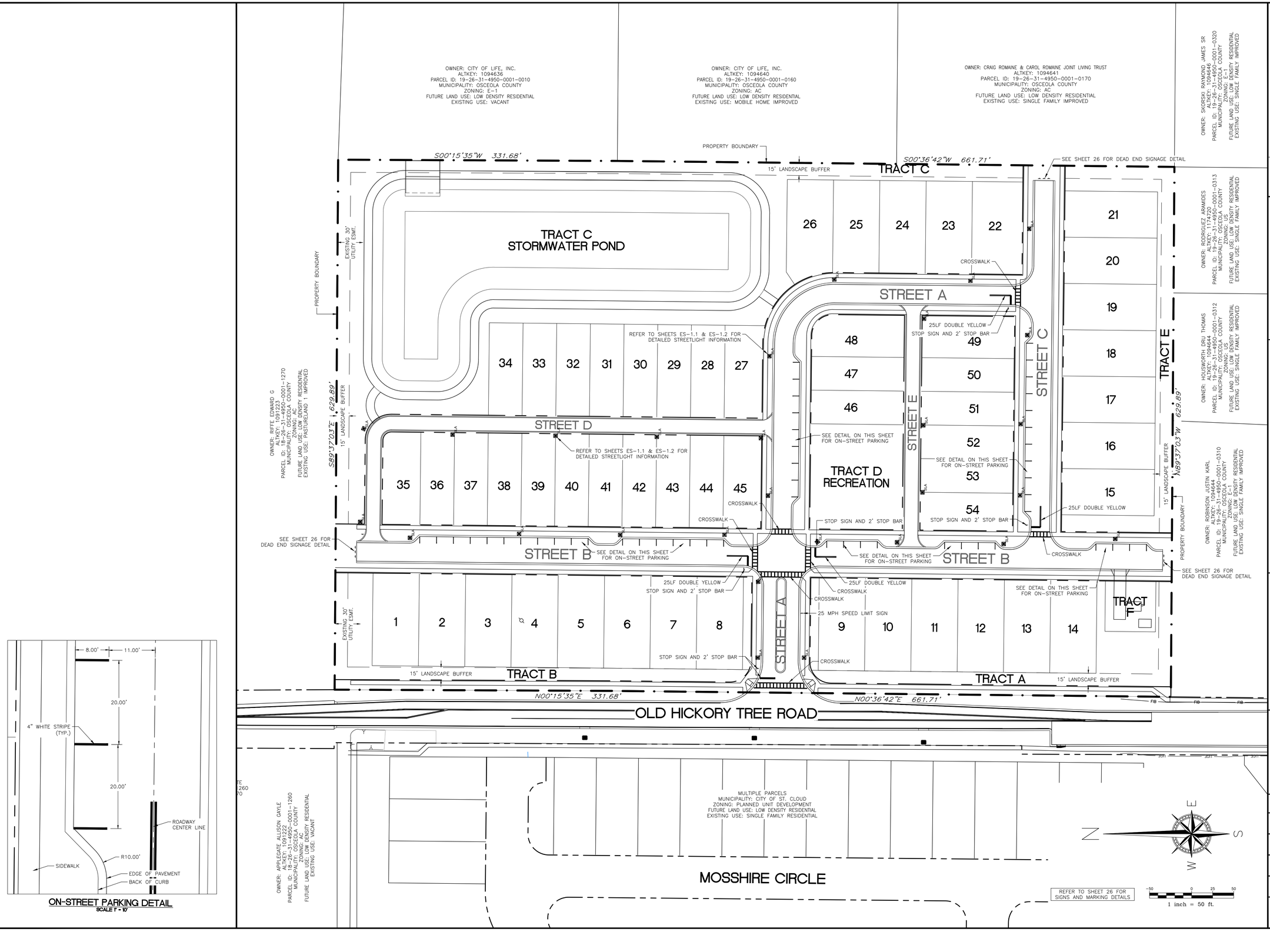
DATE
June 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
1" = 50'

SHEET NUMBER
08



ON-STREET PARKING DETAIL
SCALE 1" = 10'

REVISION	DATE

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SIGNAGE, MARKING, AND LIGHTING PLAN

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
June 2025

DRAWN BY
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SCALE
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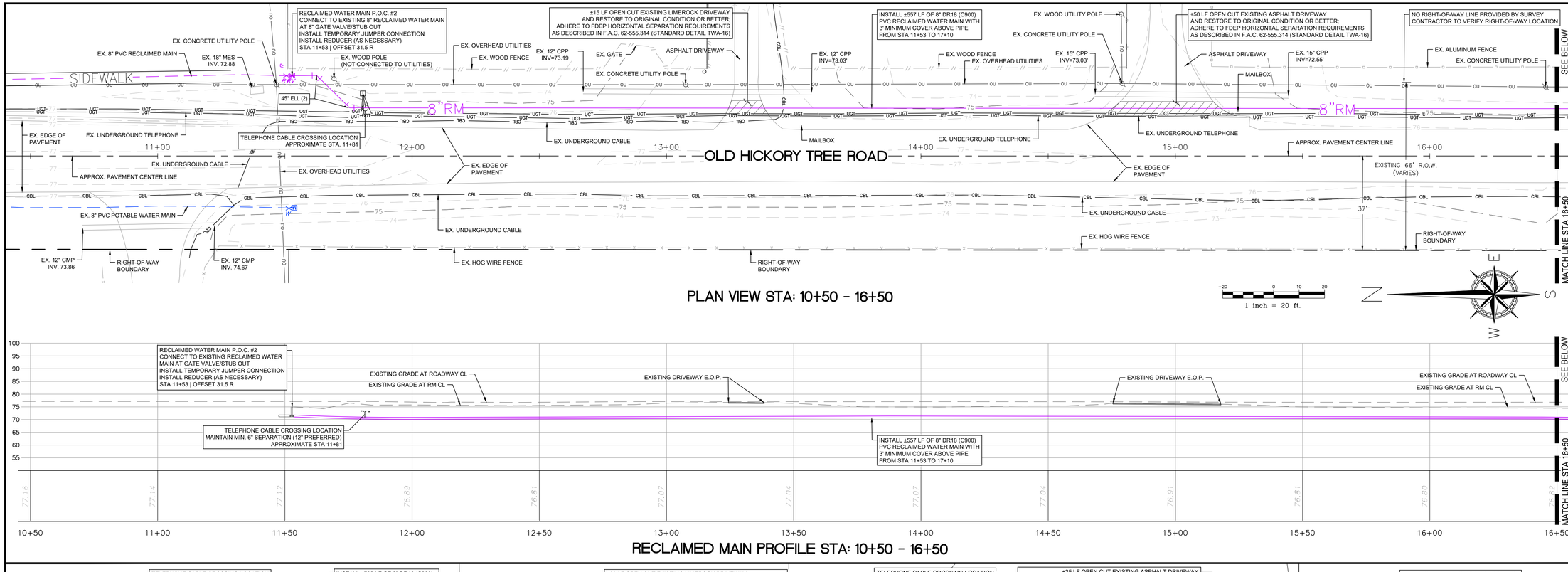
SHEET NUMBER
09



REVISION	DATE
Revised per TVVA comments dated Feb. 3, 2025	Mar. 2025

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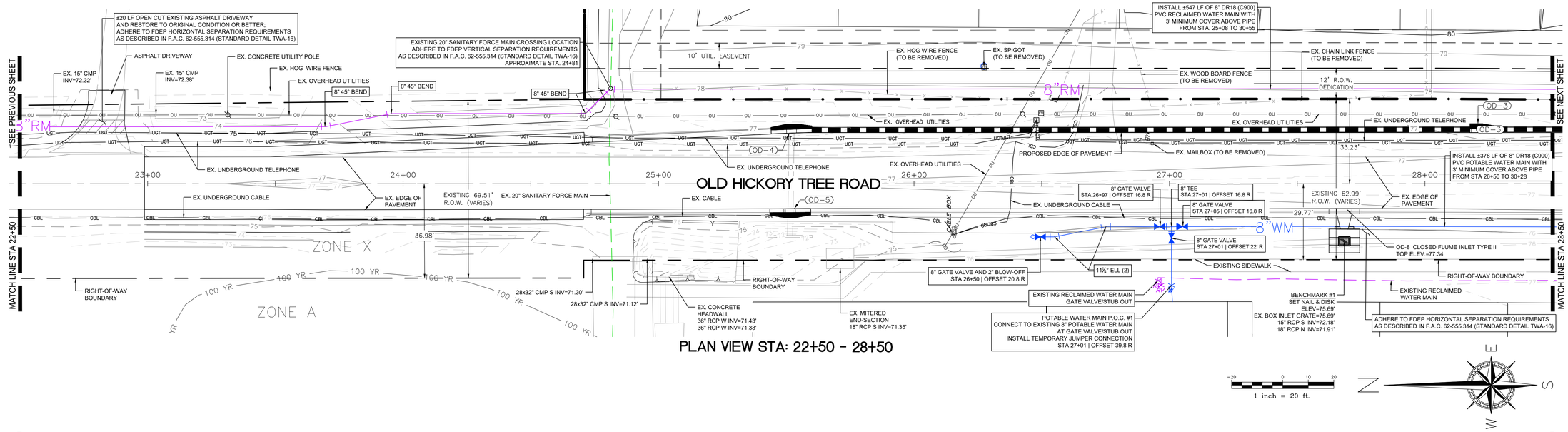
OFFSITE UTILITY PLAN 1

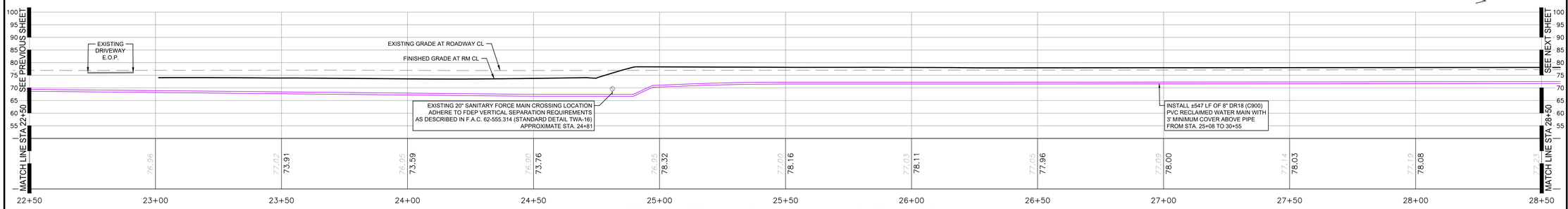
THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

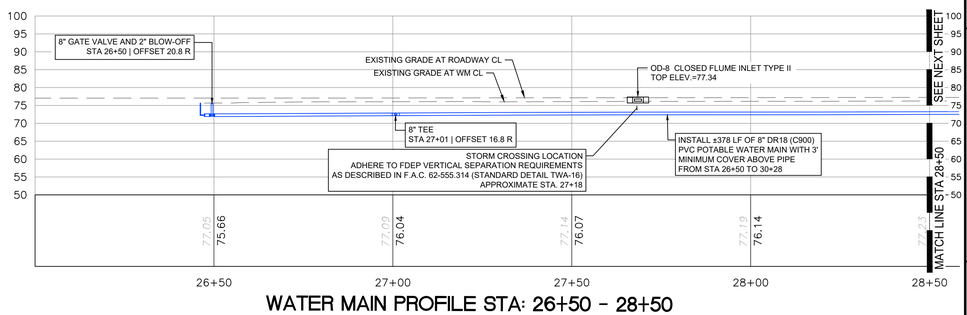
DATE	June 2025
DRAWN BY	TLK/JMK
PROJECT NUMBER	23-12
SCALE	1" = 20'
SHEET NUMBER	10



PLAN VIEW STA: 22+50 - 28+50



RECLAIMED MAIN PROFILE STA: 22+50 - 28+50



WATER MAIN PROFILE STA: 26+50 - 28+50

GENERAL NOTES:

- THE TERMS DIRECTIONAL BORE, HORIZONTAL DIRECTIONAL DRILLING OR HDD ARE USED ON THESE PLANS INTERCHANGEABLY
- PROPOSED FORCE MAIN INSTALLATION SHALL BE VIA OPEN CUT TRENCH UNLESS OTHERWISE SPECIFIED
- ALL DISTURBED AREAS SHALL BE SODDED
- ALL DISTURBED DRIVEWAYS SHALL BE RESTORED TO ORIGINAL CONDITIONS OR BETTER
- THE CONTRACTOR SHALL NOT COMPLETELY BLOCK ANY DRIVEWAY, PAVED OR UNPAVED
- ANY SIGNAGE AFFECTED BY EXCAVATION SHALL BE TEMPORARILY RELOCATED AND REPLACED IN ITS ORIGINAL LOCATION IMMEDIATELY AFTER THE AREA IS BACKFILLED
- ALL UTILITY SEPARATION MEASUREMENTS ARE BETWEEN THE OUTER DIAMETER OF EACH UTILITY AND THE OUTER DIAMETER OF THE BORE HOLE
- THE APPROXIMATE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR; UNLESS NOTED, ACTUAL SIZES AND DEPTHS OF EXISTING UNDERGROUND UTILITIES HAVE NOT BEEN SURVEYED AND MUST BE VERIFIED BY THE CONTRACTOR IN THE FIELD PRIOR TO CONSTRUCTION
- THE CONTRACTOR SHALL COORDINATE ADJUSTMENTS TO THE UNDERGROUND FIBER OPTIC, TELEPHONE AND ELECTRIC CABLES AS NECESSARY TO AVOID CONFLICTS WITH THE PROPOSED SANITARY FORCE MAIN
- ALL PIPE SEPARATION REQUIREMENTS SHALL BE MET IN ACCORDANCE WITH FDEP STANDARDS, F.A.C. RULE 62-555.314 AND THE LATEST EDITIONS OF TOHO WATER AUTHORITY (TWA) STANDARDS, SPECIFICATIONS AND DETAILS
- THE MEASURED LENGTH OF DIRECTIONAL BORES REFERS TO THE ANTICIPATED JUNCTION OF THE PROPOSED PVC AND HDPE PIPES; THE ACTUAL DISTANCE AND ANGLES OF DRILLING OPERATIONS FOR DIRECTIONAL BORES TO BE DETERMINED BY THE CONTRACTOR
- ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES SHALL BE REPAIRED AT THE SOLE EXPENSE OF THE CONTRACTOR
- RECLAIMED WATER MAIN CONSTRUCTION SHALL CONFORM TO THE LATEST EDITIONS OF TWA STANDARDS, SPECIFICATIONS AND DETAILS
- HDD OPERATIONS SHALL CONFORM TO THE LATEST EDITIONS OF TWA STANDARDS, SPECIFICATIONS AND DETAILS
- MAINTENANCE OF TRAFFIC SHALL CONFORM TO FDOT STANDARD PLANS INDEX (PREFIX 102) 600-608, 625, 628, 650 & 655 AS APPLICABLE
- RESTRAINED JOINTS SHALL BE PROVIDED AT ALL BENDS, WYES, TEES, CAPS, VALVES AND REDUCERS PER TWA SPECIFICATIONS
- WATER SERVICES 2" AND SMALLER SHALL UTILIZE A DOUBLE STRAP TAPPING SADDLE, A CORPORATION STOP, AND BLUE PE TUBING. NO FITTINGS ALLOWED BETWEEN CORP. STOP AND CURB STOP.
- REUSE SERVICES 2" AND SMALLER SHALL UTILIZE A DOUBLE STRAP TAPPING SADDLE, A CORPORATION STOP, AND PURPLE PE TUBING. NO FITTINGS ALLOWED BETWEEN CORP. STOP AND CURB STOP.
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- PERMANENT STRUCTURES SHALL MAINTAIN A MINIMUM 15 FEET OF HORIZONTAL SEPARATION FROM TOHO MAINTAINED UTILITIES.

LEGEND

- RIGHT-OF-WAY LINE
- CENTER LINE
- PROPOSED POTABLE WATER MAIN (BURIED)
- PROPOSED RECLAIMED WATER MAIN (BURIED)
- PROPOSED SANITARY FORCE MAIN (BURIED)
- EXISTING POTABLE WATER MAIN (BURIED)
- EXISTING RECLAIMED WATER MAIN (BURIED)
- EXISTING SANITARY FORCE MAIN (BURIED)
- EXISTING RECLAIMED WATER MAIN (BURIED)
- EXISTING SANITARY FORCE MAIN (BURIED)
- CBL — CBL — EXISTING CABLE (BURIED)
- UGT — UGT — EXISTING TELEPHONE (BURIED)
- OU — OU — OU — EXISTING OVERHEAD UTILITY LINE
- ×131.80 EXISTING GROUND SPOT ELEVATION

REVISION	DATE
Revised per TWA comments dated Feb. 3, 2025	Mar. 2025

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OLD HICKORY TREE ESTATES

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OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
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OFFSITE UTILITY PLAN 2

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA REGISTERED PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
June 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
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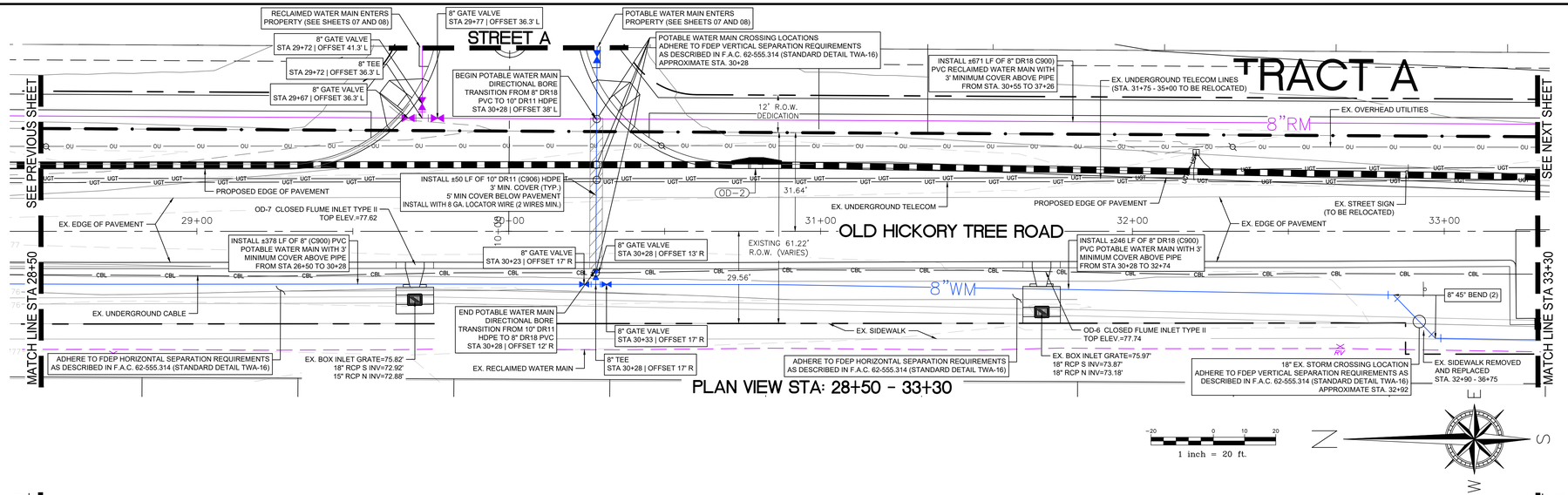
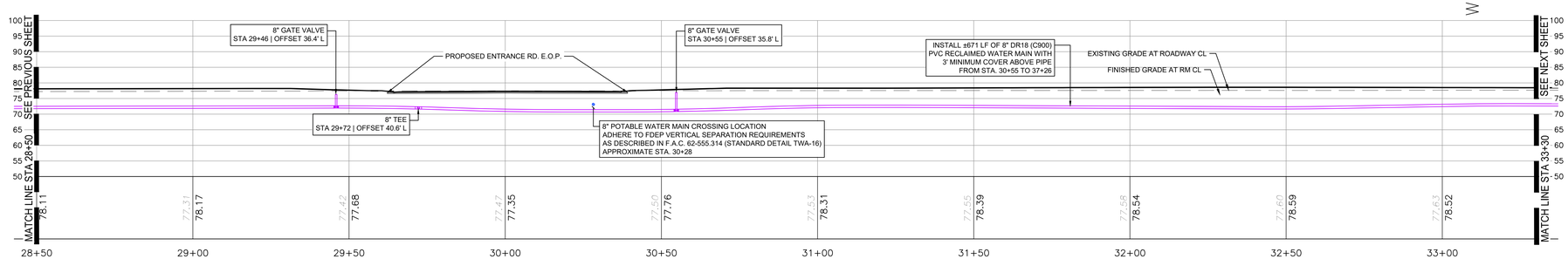
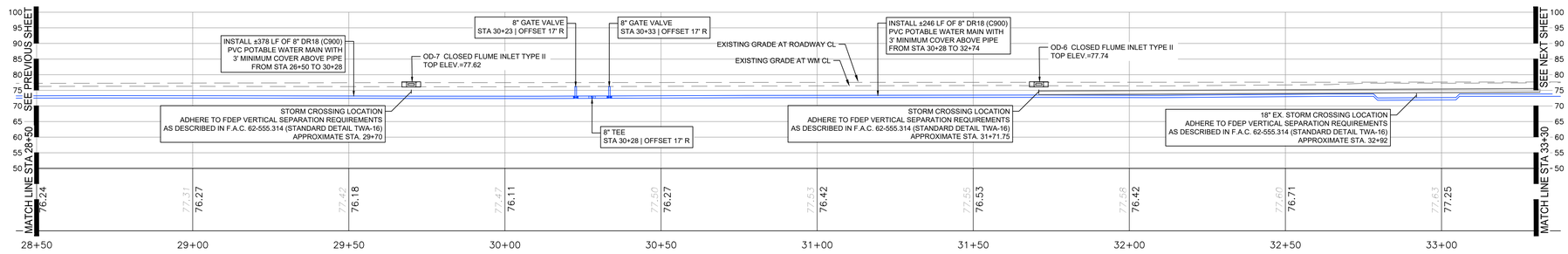
SCALE
1" = 20'

SHEET NUMBER
11







GENERAL NOTES:

- THE TERMS DIRECTIONAL BORE, HORIZONTAL DIRECTIONAL DRILLING OR HDD ARE USED ON THESE PLANS INTERCHANGEABLY
- PROPOSED FORCE MAIN INSTALLATION SHALL BE VIA OPEN CUT TRENCH UNLESS OTHERWISE SPECIFIED
- ALL DISTURBED AREAS SHALL BE SODDED
- ALL DISTURBED DRIVEWAYS SHALL BE RESTORED TO ORIGINAL CONDITIONS OR BETTER
- THE CONTRACTOR SHALL NOT COMPLETELY BLOCK ANY DRIVEWAY, PAVED OR UNPAVED
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LEGEND

- RIGHT-OF-WAY LINE
- CENTER LINE
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- PROPOSED RECLAIMED WATER MAIN (BURIED)
- PROPOSED SANITARY FORCE MAIN (BURIED)
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- EXISTING RECLAIMED WATER MAIN (BURIED)
- EXISTING SANITARY FORCE MAIN (BURIED)
- EXISTING RECLAIMED WATER MAIN (BURIED)
- EXISTING SANITARY FORCE MAIN (BURIED)
- CBL — CBL — EXISTING CABLE (BURIED)
- UGT — UGT — EXISTING TELEPHONE (BURIED)
- OU — OU — OU — EXISTING OVERHEAD UTILITY LINE
- ×131.80 EXISTING GROUND SPOT ELEVATION

REVISION	DATE
Revised per TWA comments dated Feb. 3, 2025	Mar. 2025
Revised per TWA comments dated Apr. 9, 2025	Apr. 2025

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SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

OFFSITE UTILITY PLAN 3

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

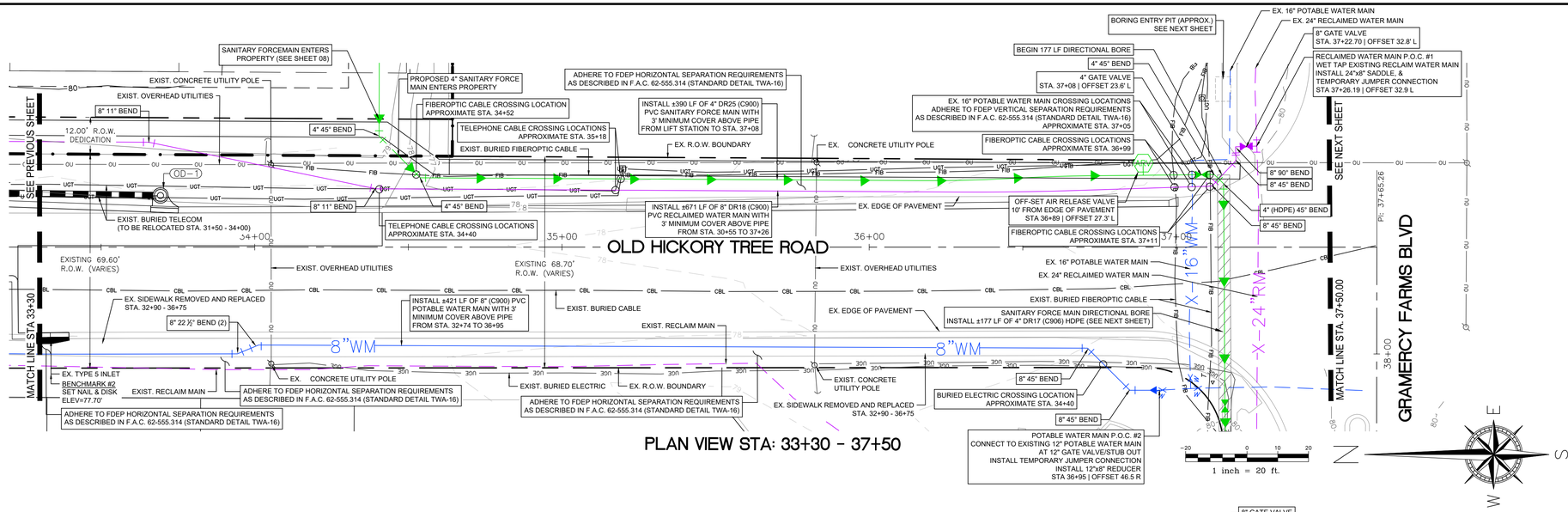
DATE
June 2025

DRAWN BY
TLK/JMK

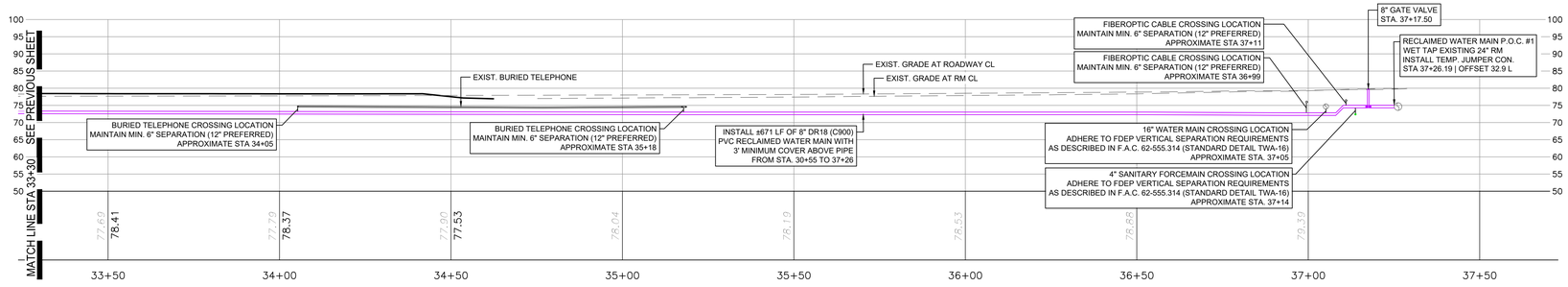
PROJECT NUMBER
23-12

SCALE
1" = 20'

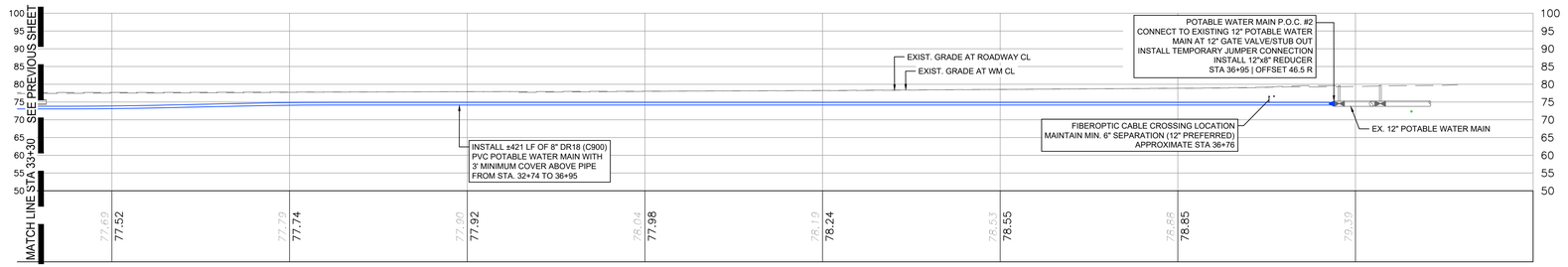
SHEET NUMBER
12



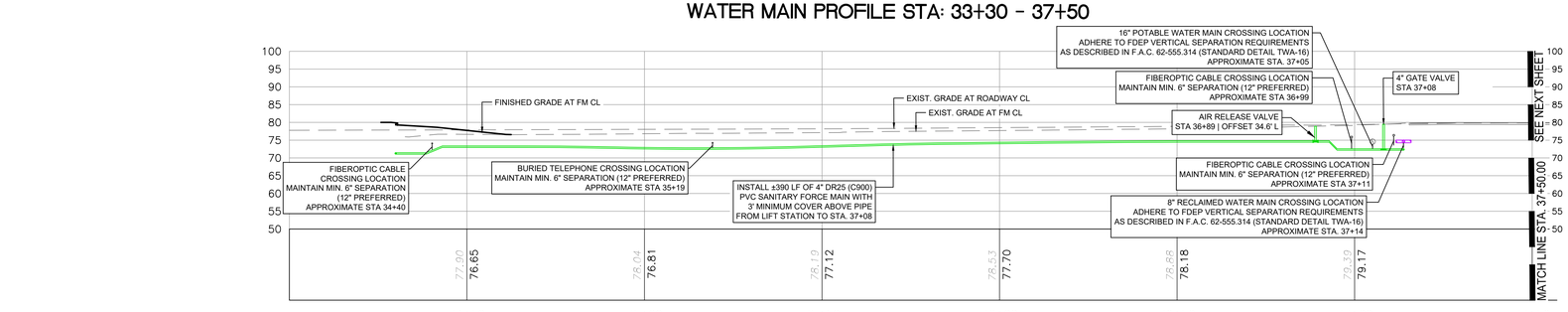
PLAN VIEW STA: 33+30 - 37+50



RECLAIMED MAIN PROFILE STA: 33+30 - 37+50



WATER MAIN PROFILE STA: 33+30 - 37+50



SANITARY FORCE MAIN PROFILE STA: 34+30 - 37+50

LEGEND

- RIGHT-OF-WAY LINE
- CENTER LINE
- PROPOSED POTABLE WATER MAIN (BURIED)
- PROPOSED RECLAIMED WATER MAIN (BURIED)
- PROPOSED SANITARY FORCE MAIN (BURIED)
- EXISTING POTABLE WATER MAIN (BURIED)
- EXISTING RECLAIMED WATER MAIN (BURIED)
- EXISTING SANITARY FORCE MAIN (BURIED)
- EXISTING RECLAIMED WATER MAIN (BURIED)
- EXISTING SANITARY FORCE MAIN (BURIED)
- CBL — EXISTING CABLE (BURIED)
- UGT — UGT — EXISTING TELEPHONE (BURIED)
- OU — OU — OU — EXISTING OVERHEAD UTILITY LINE
- ×131.80 EXISTING GROUND SPOT ELEVATION

GENERAL NOTES:

- THE TERMS DIRECTIONAL BORE, HORIZONTAL DIRECTIONAL DRILLING OR HDD ARE USED ON THESE PLANS INTERCHANGEABLY
- PROPOSED FORCE MAIN INSTALLATION SHALL BE VIA OPEN CUT TRENCH UNLESS OTHERWISE SPECIFIED
- ALL DISTURBED AREAS SHALL BE SODDED
- ALL DISTURBED DRIVEWAYS SHALL BE RESTORED TO ORIGINAL CONDITIONS OR BETTER
- THE CONTRACTOR SHALL NOT COMPLETELY BLOCK ANY DRIVEWAY, PAVED OR UNPAVED
- ANY SIGNAGE AFFECTED BY EXCAVATION SHALL BE TEMPORARILY RELOCATED AND REPLACED IN ITS ORIGINAL LOCATION IMMEDIATELY AFTER THE AREA IS BACKFILLED
- ALL UTILITY SEPARATION MEASUREMENTS ARE BETWEEN THE OUTER DIAMETER OF EACH UTILITY AND THE OUTER DIAMETER OF THE BORE HOLE
- THE APPROXIMATE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR, UNLESS NOTED, ACTUAL SIZES AND DEPTHS OF EXISTING UNDERGROUND UTILITIES HAVE NOT BEEN SURVEYED AND MUST BE VERIFIED BY THE CONTRACTOR IN THE FIELD PRIOR TO CONSTRUCTION
- THE CONTRACTOR SHALL COORDINATE ADJUSTMENTS TO THE UNDERGROUND FIBER OPTIC, TELEPHONE AND ELECTRIC CABLES AS NECESSARY TO AVOID CONFLICTS WITH THE PROPOSED SANITARY FORCE MAIN
- ALL PIPE SEPARATION REQUIREMENTS SHALL BE MET IN ACCORDANCE WITH FDEP STANDARDS, F.A.C. RULE 62-555.314 AND THE LATEST EDITIONS OF TOHO WATER AUTHORITY (TWA) STANDARDS, SPECIFICATIONS AND DETAILS
- THE MEASURED LENGTH OF DIRECTIONAL BORES REFERS TO THE ANTICIPATED JUNCTION OF THE PROPOSED PVC AND HDPE PIPES; THE ACTUAL DISTANCE AND ANGLES OF DRILLING OPERATIONS FOR DIRECTIONAL BORES TO BE DETERMINED BY THE CONTRACTOR
- ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES SHALL BE REPAIRED AT THE SOLE EXPENSE OF THE CONTRACTOR
- RECLAIMED WATER MAIN CONSTRUCTION SHALL CONFORM TO THE LATEST EDITIONS OF TWA STANDARDS, SPECIFICATIONS AND DETAILS
- HDD OPERATIONS SHALL CONFORM TO THE LATEST EDITIONS OF TWA STANDARDS, SPECIFICATIONS AND DETAILS
- MAINTENANCE OF TRAFFIC SHALL CONFORM TO FDOT STANDARD PLANS INDEX (PREFIX 102) 600-608, 625, 628, 650 & 655 AS APPLICABLE
- RESTRAINED JOINTS SHALL BE PROVIDED AT ALL BENDS, WYES, TEES, CAPS, VALVES AND REDUCERS PER TWA SPECIFICATIONS
- WATER SERVICES 2" AND SMALLER SHALL UTILIZE A DOUBLE STRAP TAPPING SADDLE, A CORPORATION STOP, AND BLUE PE TUBING. NO FITTINGS ALLOWED BETWEEN CORP. STOP AND CURB STOP.
- REUSE SERVICES 2" AND SMALLER SHALL UTILIZE A DOUBLE STRAP TAPPING SADDLE, A CORPORATION STOP, AND PURPLE PE TUBING. NO FITTINGS ALLOWED BETWEEN CORP. STOP AND CURB STOP.
- ALL PROPOSED LANDSCAPING SHALL MAINTAIN 5 FEET HORIZONTAL SEPARATION FROM THE ROOT BALL OF TREES TO TOHO MAINTAINED UTILITIES.
- ALL PROPOSED POLES (SIGN, TRAFFIC, LIGHT, ETC.) SHALL MAINTAIN A 6-FOOT MINIMUM, 10-FOOT PREFERRED, HORIZONTAL SEPARATION FROM TOHO MAINTAINED UTILITIES.
- PERMANENT STRUCTURES SHALL MAINTAIN A MINIMUM 15 FEET OF HORIZONTAL SEPARATION FROM TOHO MAINTAINED UTILITIES.

REVISION	DATE
Revised per TWA comments dated Feb. 3, 2025	Mar. 2025
Revised per TWA comments dated Apr. 9, 2025	Apr. 2025

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

OFFSITE UTILITY PLAN 4

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

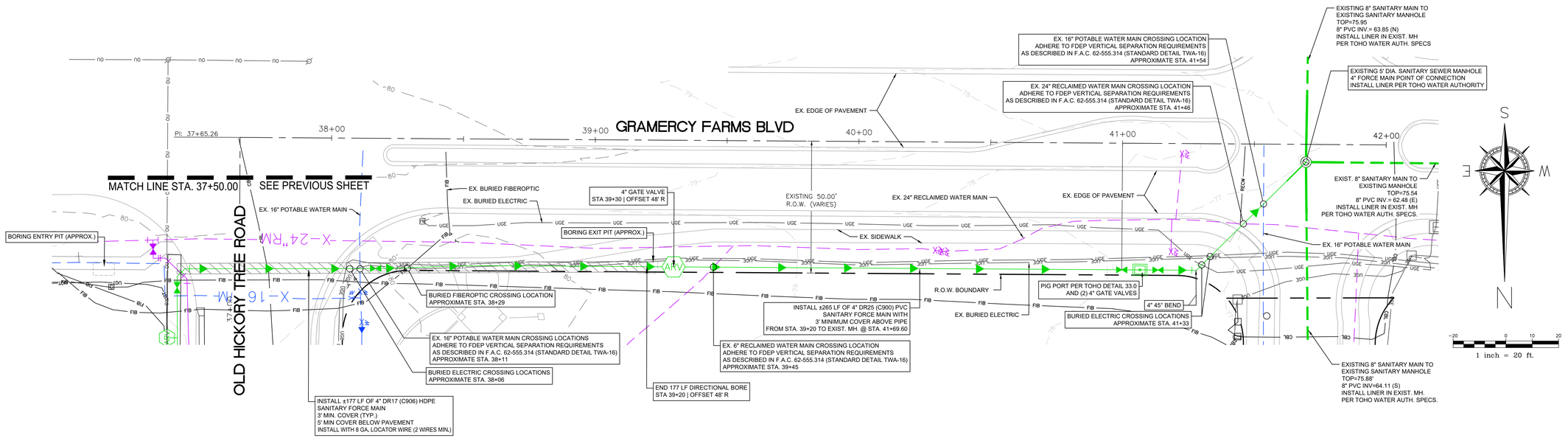
DATE
June 2025

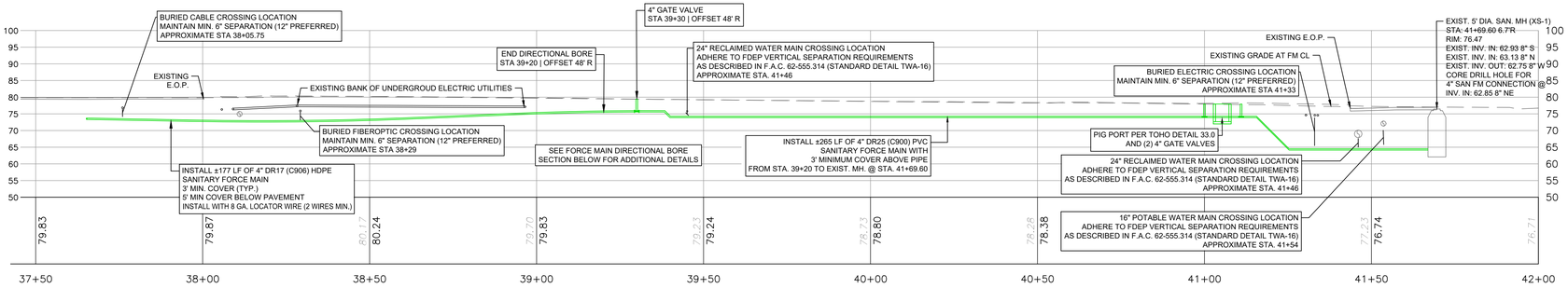
DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
1" = 20'

SHEET NUMBER
13





SANITARY FORCE MAIN PROFILE STA: 37+50 - 41+69.60

GENERAL NOTES:

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- CENTER LINE
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- PROPOSED SANITARY FORCE MAIN (BURIED)
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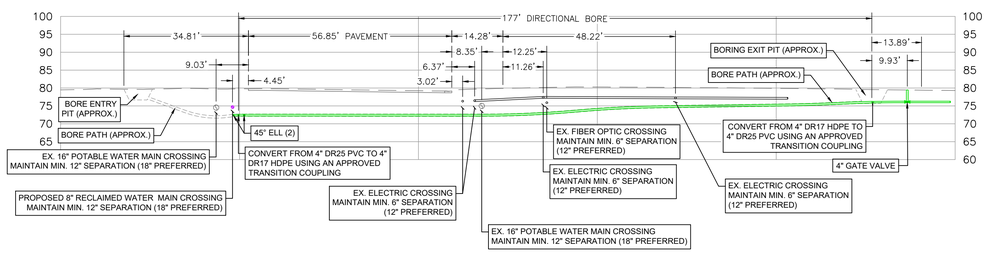

FORCE MAIN DIRECTIONAL BORE SECTION

SCALE 1" = 20'

REVISION	DATE
Revised per TWA comments dated Feb. 3, 2025	Mar. 2025
Revised per TWA comments dated Apr. 9, 2025	Apr. 2025

Knight Engineering Services
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OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

OFFSITE UTILITY PLAN 5

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

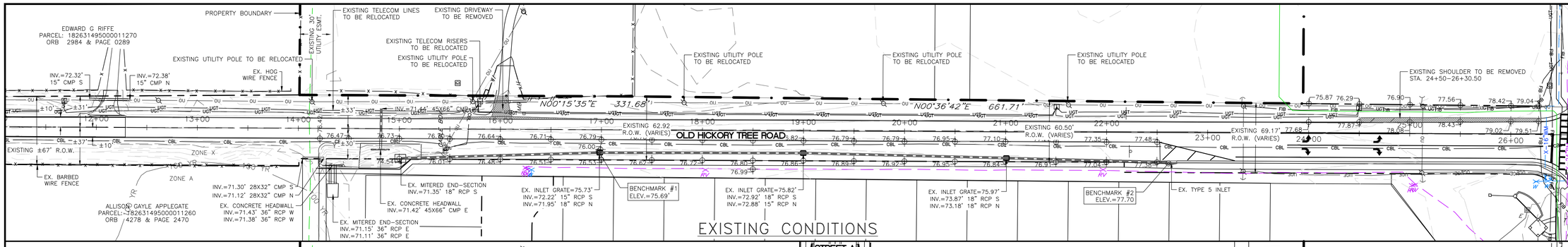
DATE
June 2025

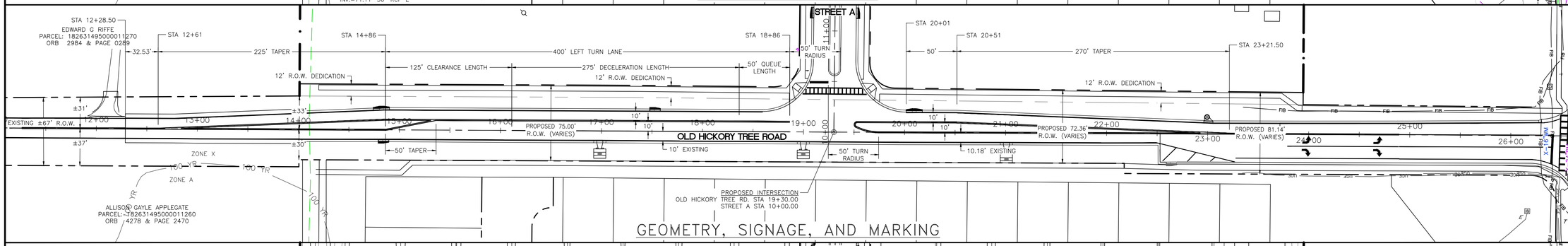
DRAWN BY
TLK/JMK

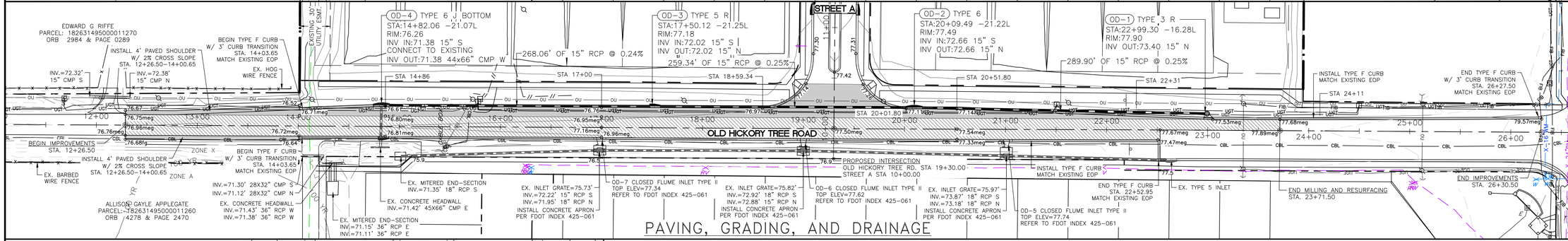
PROJECT NUMBER
23-12

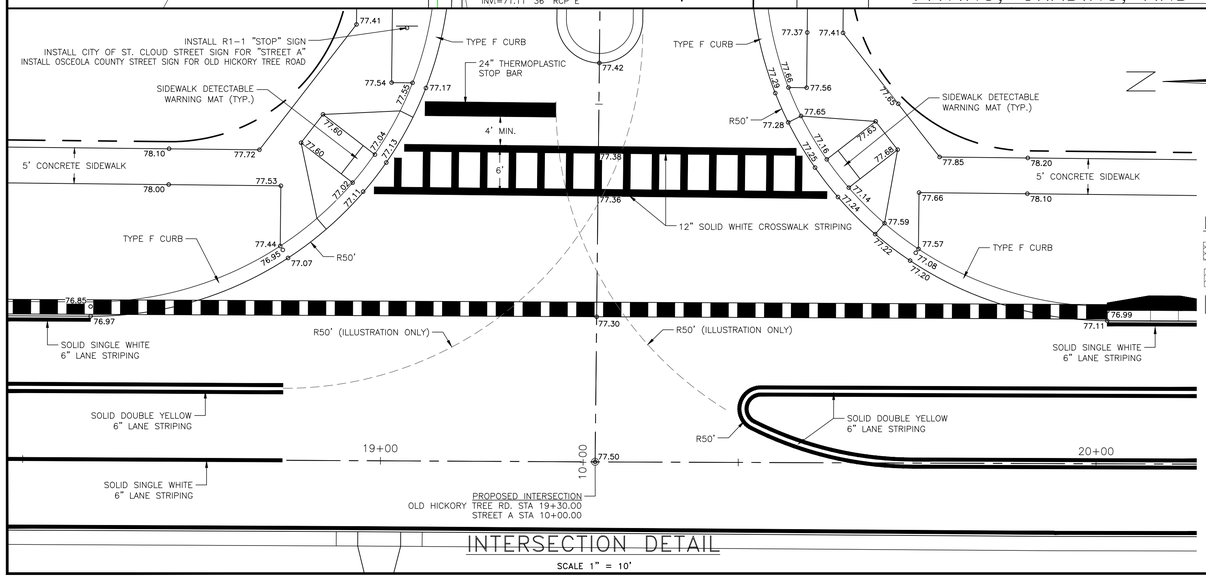
SCALE
1" = 20'

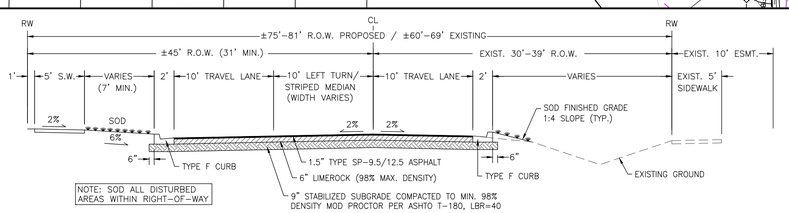
SHEET NUMBER
14



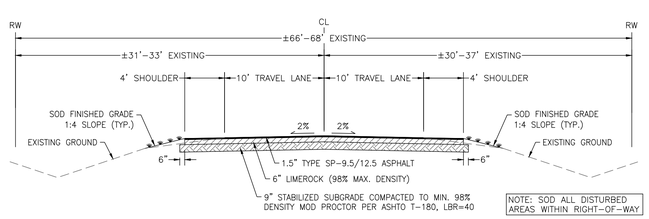








2–LANE LOCAL RD. W/ TURN LANE
STA. 14+03 – 22+52
PER LDC 4.7.1(B)
(N.T.S.)



2–LANE RD. W/ SHOULDER
STA. 12+26 – 14+03
(N.T.S.)

REVISION

DATE

Knight Engineering Services
Planning, Design, Permitting, Inspection
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Phone: (352) 394-8514
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OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

OFFSITE IMPROVEMENTS OLD HICKORY TREE ROAD

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

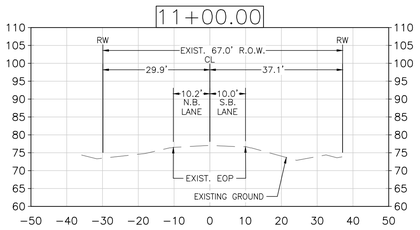
DATE
June 2025

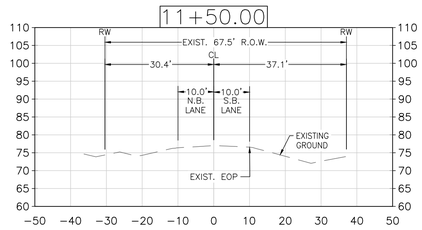
DRAWN BY
TLK/JMK

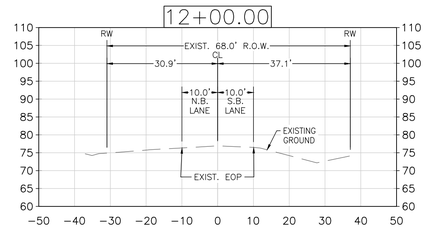
PROJECT NUMBER
23-12

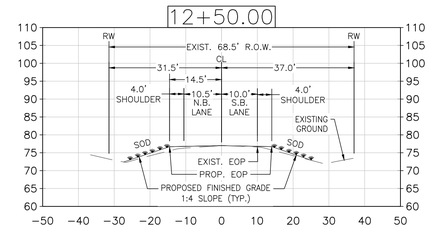
SCALE
1" = 50'

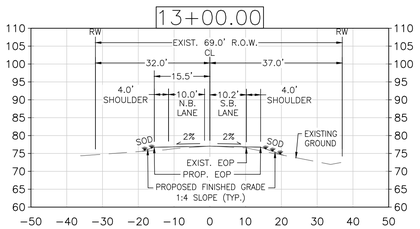
SHEET NUMBER
15

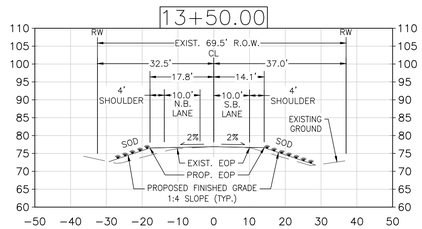


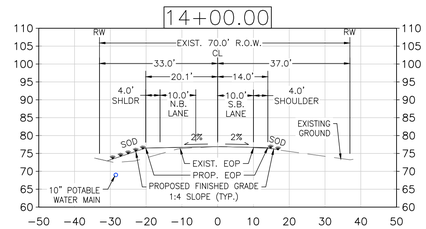


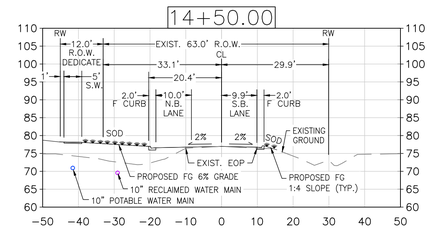


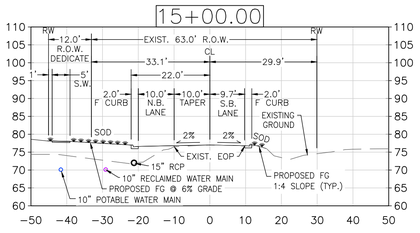


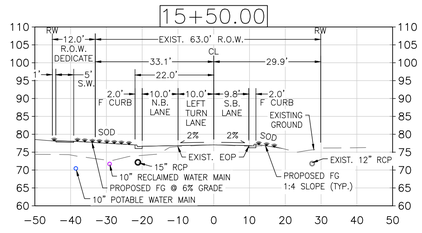


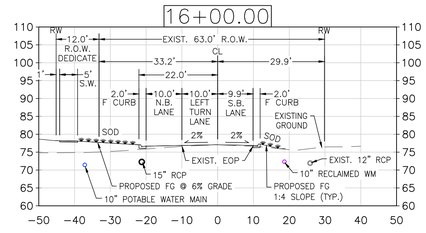


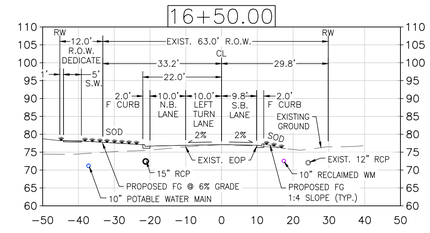


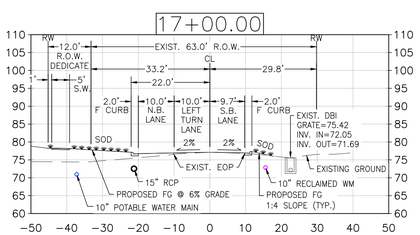


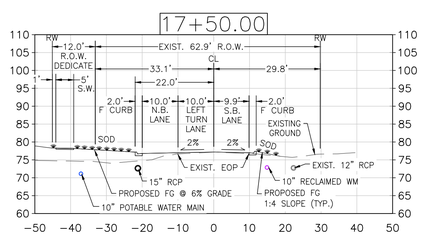


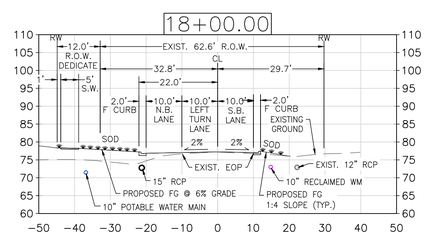


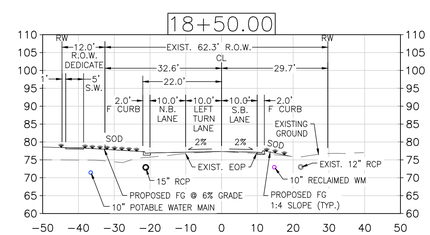












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OLD HICKORY TREE ESTATES

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225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

OLD HICKORY TREE ROAD CROSS SECTIONS

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

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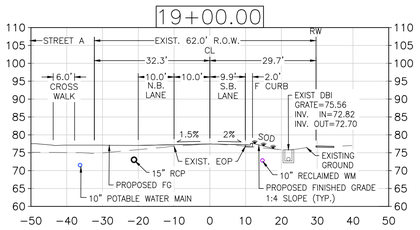
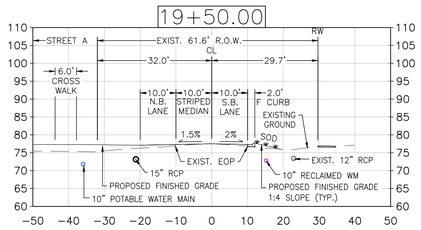
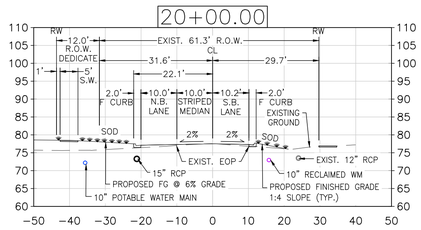
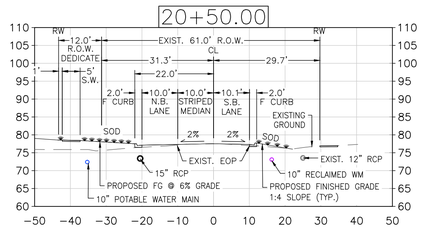
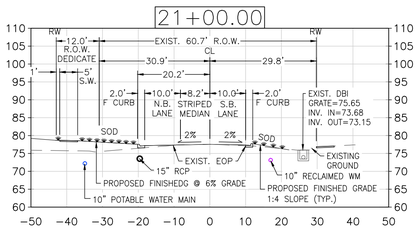
SHEET NUMBER
16

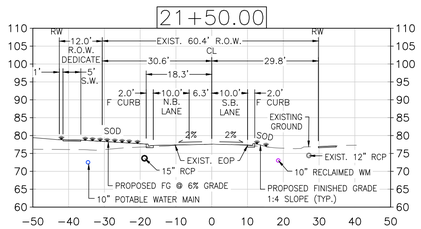


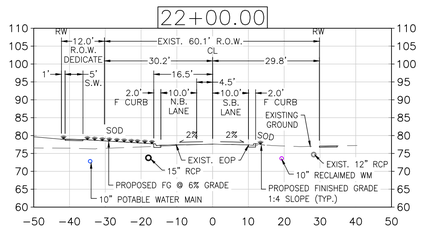


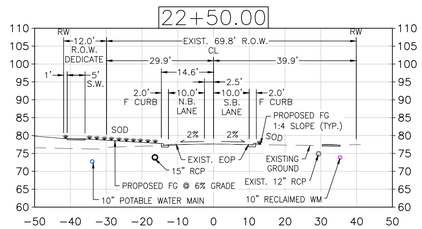


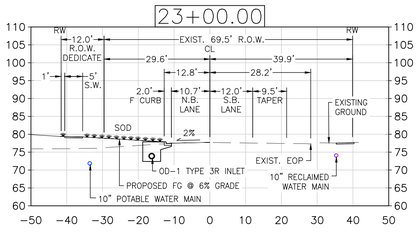


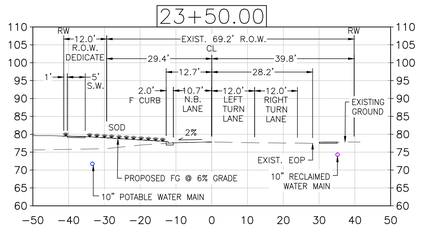


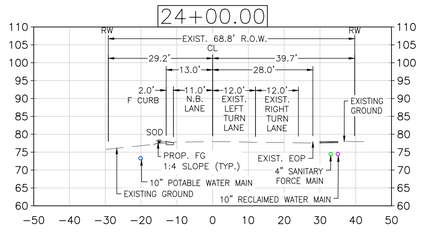


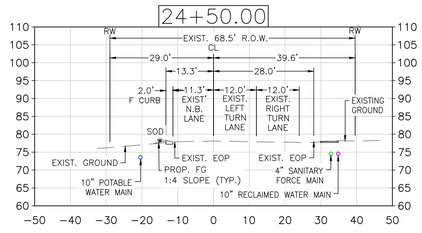


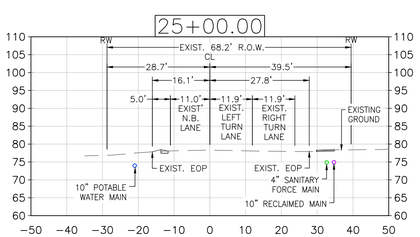












REVISION

DATE

Knight Engineering Services

Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

OLD HICKORY TREE ROAD CROSS SECTIONS

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

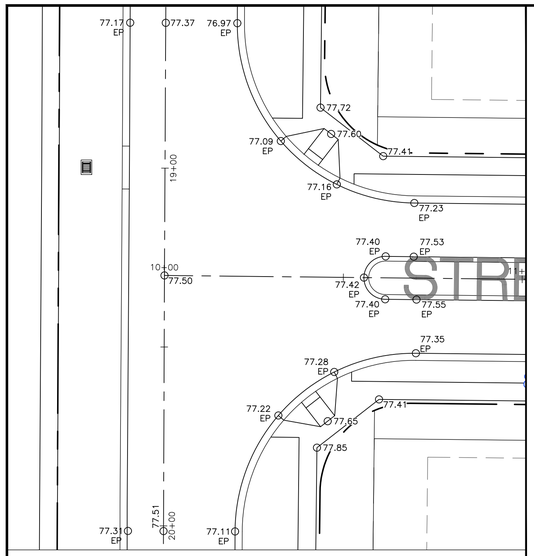
DATE
June 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

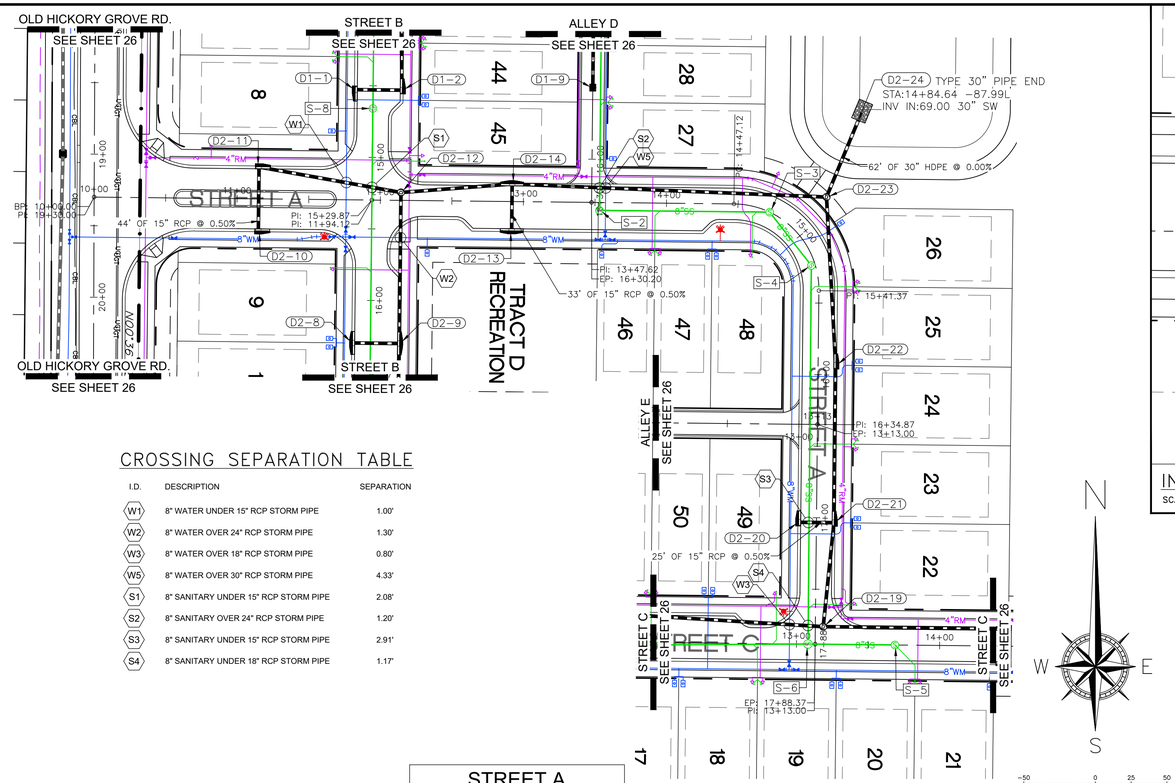
SCALE
1" = 50'

SHEET NUMBER
17



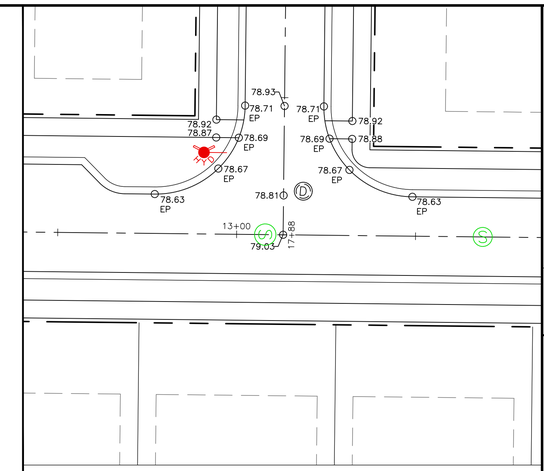
INTERSECTION DETAIL STREET A STA. 10+00

SCALE 1" = 20'



CROSSING SEPARATION TABLE

I.D.	DESCRIPTION	SEPARATION
W1	8" WATER UNDER 15" RCP STORM PIPE	1.00'
W2	8" WATER OVER 24" RCP STORM PIPE	1.30'
W3	8" WATER OVER 18" RCP STORM PIPE	0.80'
W5	8" WATER OVER 30" RCP STORM PIPE	4.33'
S1	8" SANITARY UNDER 15" RCP STORM PIPE	2.08'
S2	8" SANITARY OVER 24" RCP STORM PIPE	1.20'
S3	8" SANITARY UNDER 15" RCP STORM PIPE	2.91'
S4	8" SANITARY UNDER 18" RCP STORM PIPE	1.17'

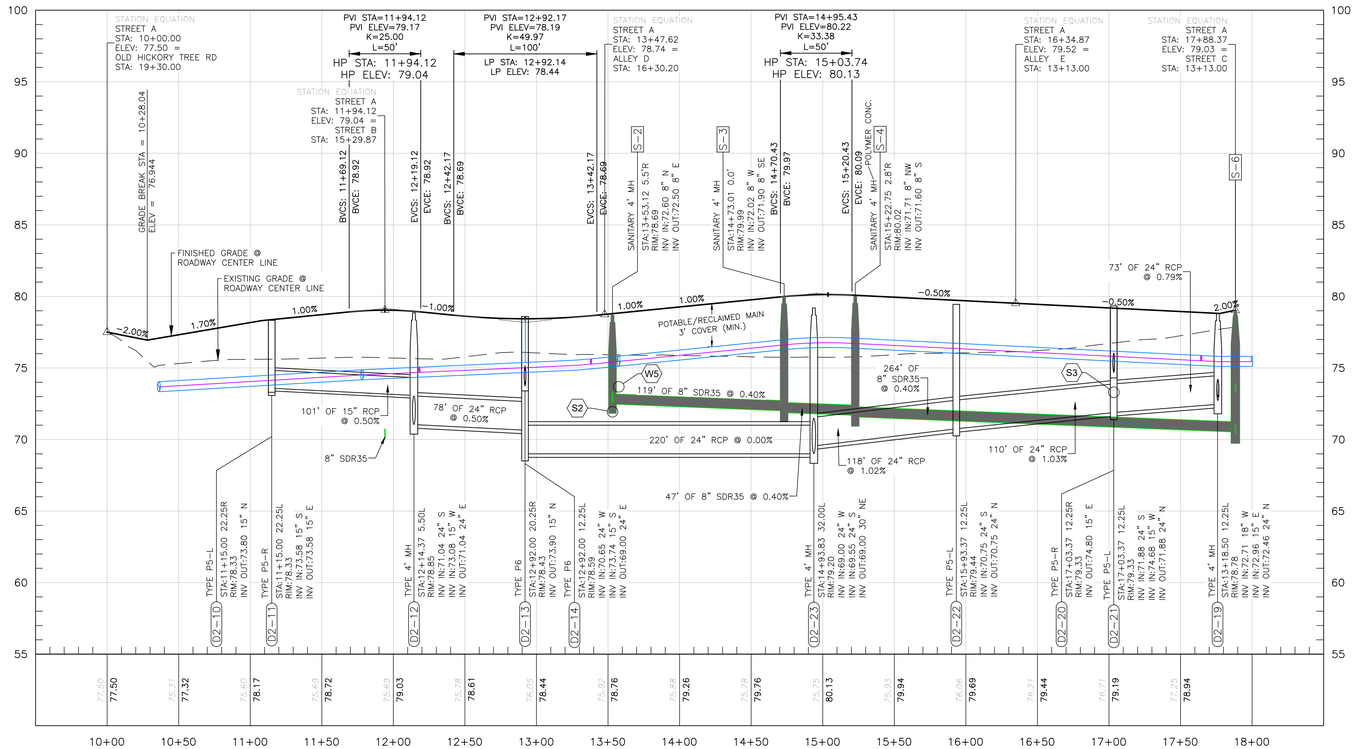


INTERSECTION DETAIL STREET A STA. 17+88.37

SCALE 1" = 20'

1 inch = 50 ft.

STREET A
STA 10+00 - 17+88.37



REVISION	DATE
Revised per TWA comments dated Feb. 3, 2025	MAR. 2025

Knight Engineering
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

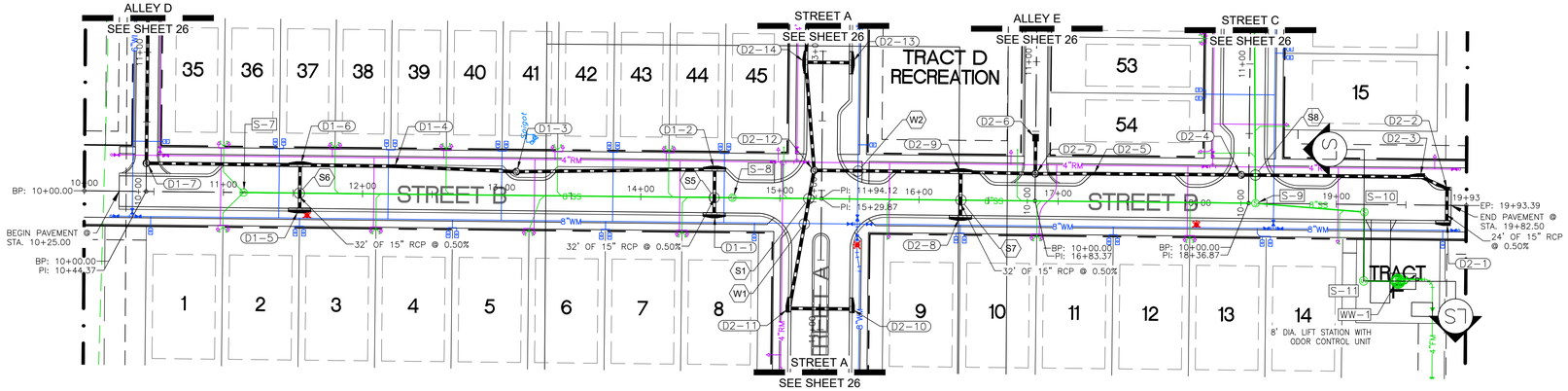
SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
DEVELOPER: OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

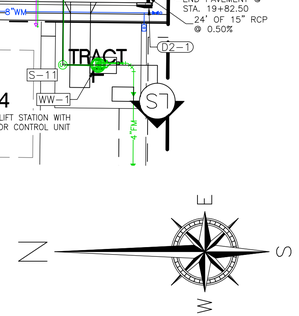
PLAN & PROFILE STREET A

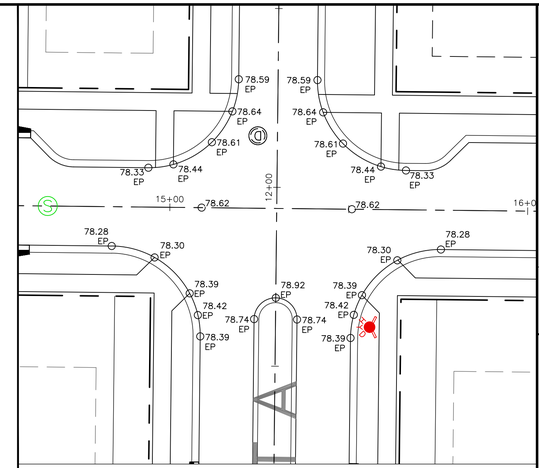
THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE	June 2025
DRAWN BY	TLK
PROJECT NUMBER	23-12
SCALE	1" = 50'
SHEET NUMBER	18







INTERSECTION DETAIL STREET B STA. 15+29.87

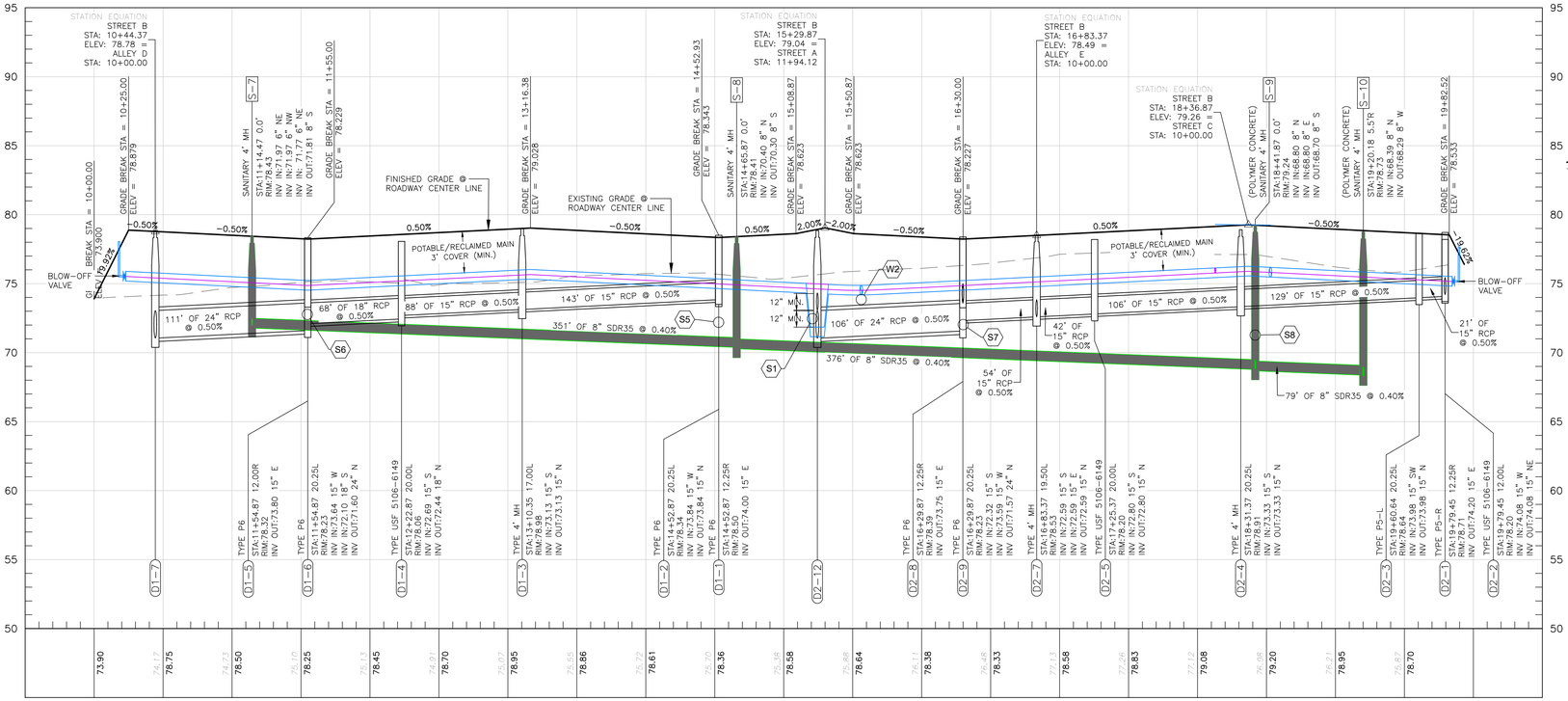
SCALE 1" = 20'

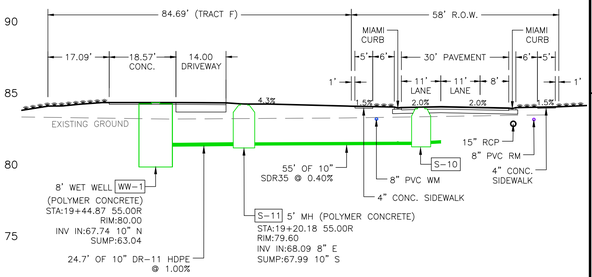
CROSSING SEPARATION TABLE

I.D.	DESCRIPTION	SEPARATION
W1	8" WATER UNDER 15" RCP STORM PIPE	1.00'
W2	8" WATER OVER 24" RCP STORM PIPE	1.30'
S1	8" SANITARY UNDER 15" RCP STORM PIPE	2.08'
S5	8" SANITARY UNDER 15" RCP STORM PIPE	2.50'
S6	8" SANITARY UNDER 15" RCP STORM PIPE	1.10'
S7	8" SANITARY UNDER 15" RCP STORM PIPE	3.06'
S8	8" SANITARY UNDER 15" RCP STORM PIPE	3.47'

STREET B
STA 10+00 - 19+93.39

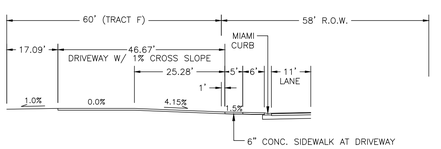
1 inch = 50 ft.





LIFT STATION
CROSS-SECTION LS-LS

SCALE 1" = 20'



LIFT STATION
DRIVEWAY PROFILE

SCALE 1" = 20'

NOTE: DRIVEWAY SHALL BE 3,500 PSI TYPE 2 CEMENT REINFORCED WITH 6x6 W2.9-2.9 WWF, H-20 TRAFFIC LOADING. STABILIZE BASE TO MIN. 12"

REVISION

DATE

Mar. 2025

Revised per TWA comments dated Feb. 3, 2025

Knight Engineering
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
DEVELOPER: OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

PLAN & PROFILE
STREET B

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

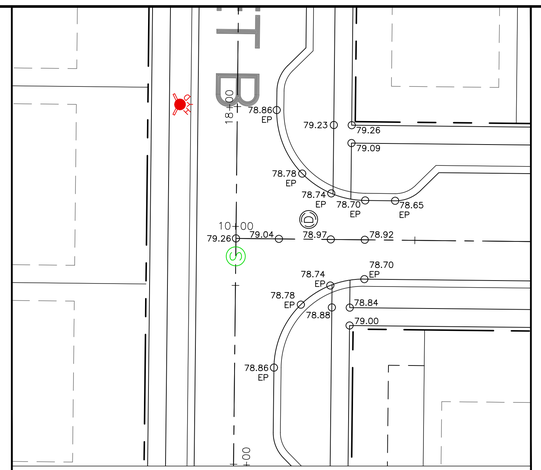
DATE
June 2025

DRAWN BY
TLK

PROJECT NUMBER
23-12

SCALE
1" = 50'

SHEET NUMBER
19

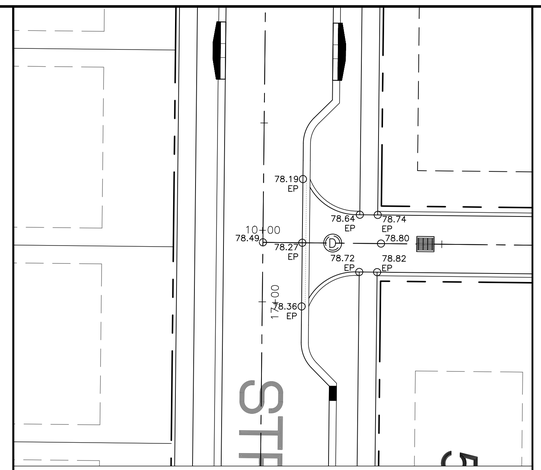


INTERSECTION DETAIL STREET C STA. 10+00

SCALE 1" = 20'

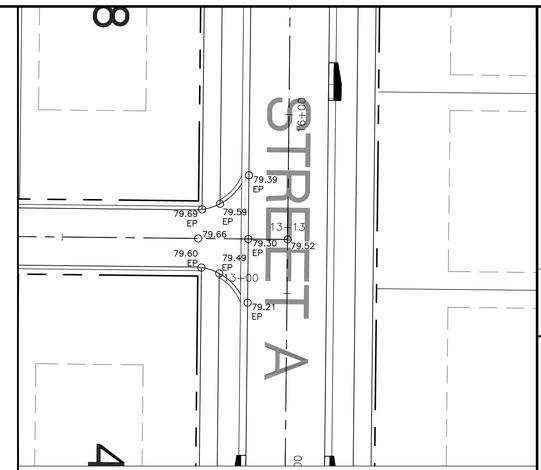
CROSSING SEPARATION TABLE

I.D.	DESCRIPTION	SEPARATION
W3	8" WATER OVER 18" RCP STORM PIPE	0.80'
W4	8" WATER OVER 18" RCP STORM PIPE	0.72'
S4	8" SANITARY UNDER 18" RCP STORM PIPE	1.17'
S8	8" SANITARY UNDER 15" RCP STORM PIPE	3.47'
S9	8" SANITARY UNDER 15" RCP STORM PIPE	3.26'



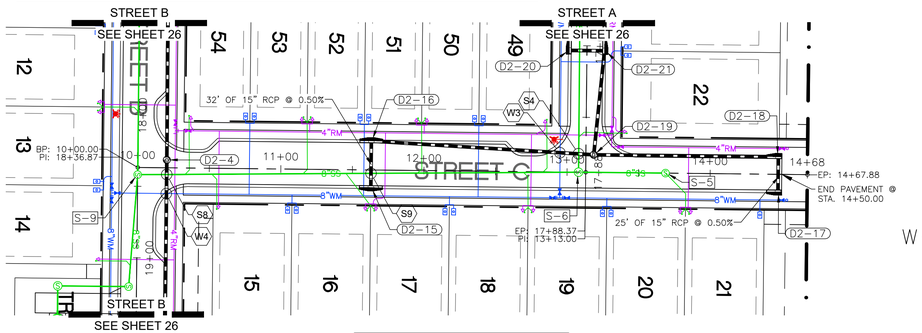
INTERSECTION DETAIL STREET E STA. 10+00

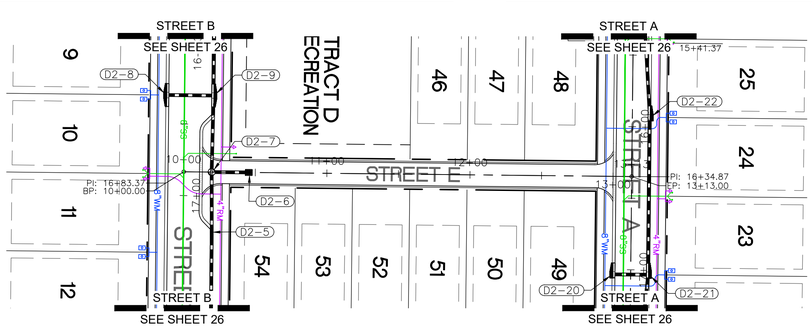
SCALE 1" = 20'



INTERSECTION DETAIL STREET E STA. 13+13

SCALE 1" = 20'





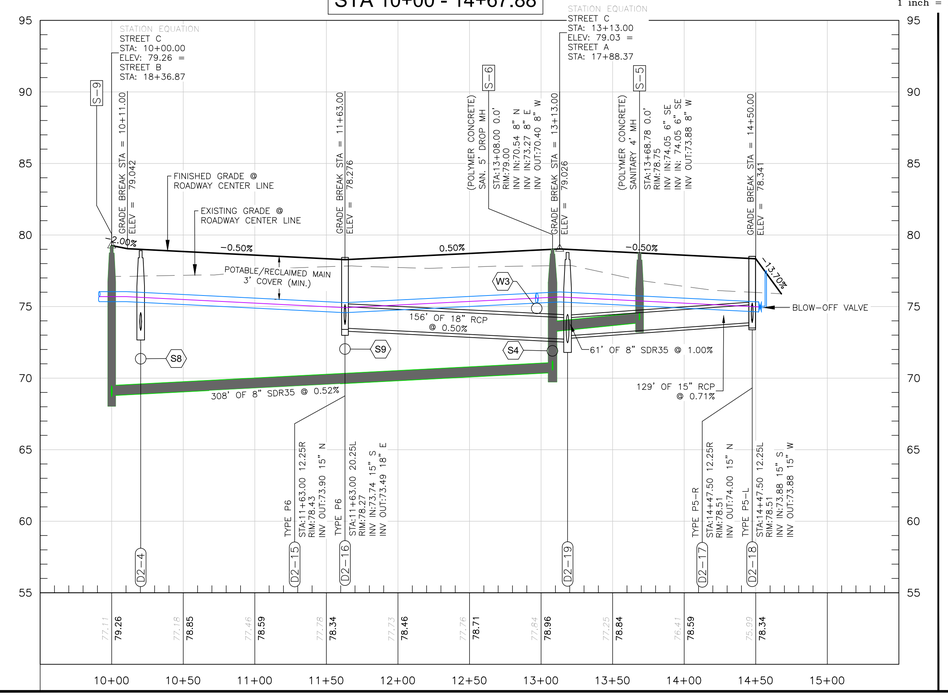
N

W E

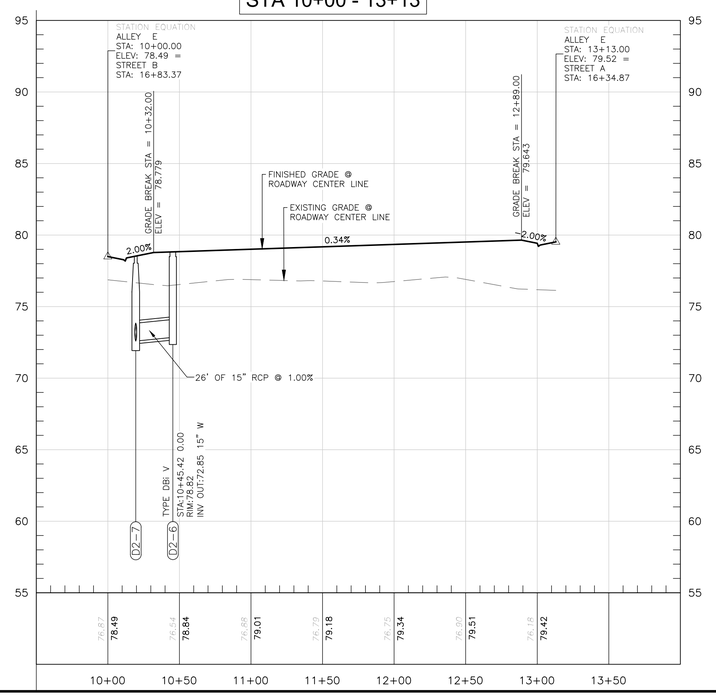
S

1 inch = 50 ft.

STREET C
STA 10+00 - 14+67.88



ALLEY E
STA 10+00 - 13+13



Knight Engineering
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

REVISION

DATE

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
DEVELOPER: OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

PLAN & PROFILE STREET C & ALLEY E

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

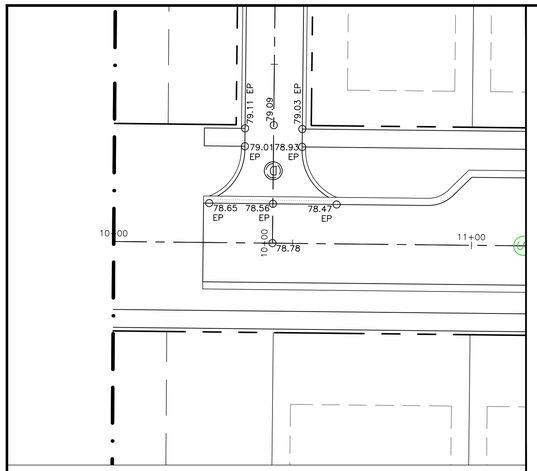
DATE
June 2025

DRAWN BY
TLK

PROJECT NUMBER
23-12

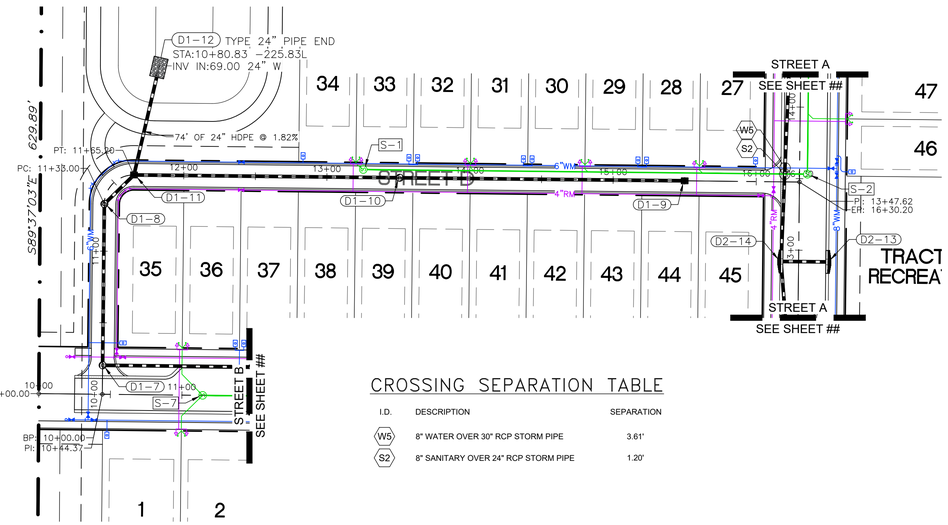
SCALE
1" = 50'

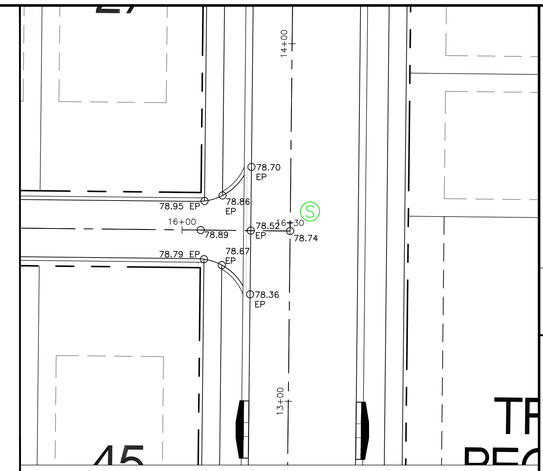
SHEET NUMBER
20



INTERSECTION DETAIL STREET D STA. 10+00

SCALE 1" = 20'



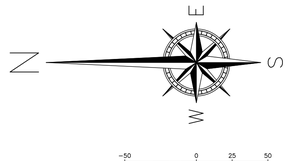


INTERSECTION DETAIL STREET D STA. 13+30.20

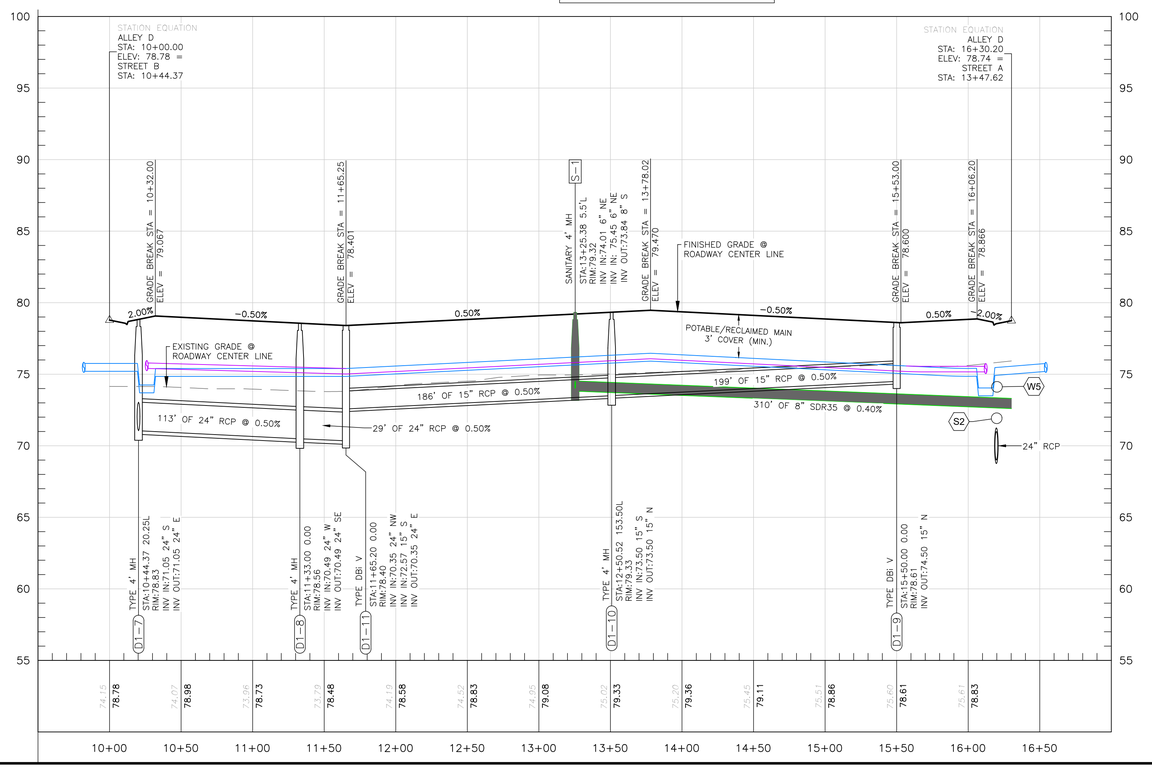
SCALE 1" = 20'

CROSSING SEPARATION TABLE

I.D.	DESCRIPTION	SEPARATION
W5	8" WATER OVER 30" RCP STORM PIPE	3.61'
S2	8" SANITARY OVER 24" RCP STORM PIPE	1.20'



ALLEY D
STA 10+00 - 16+30.20



REVISION

DATE

Knight Engineering
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
DEVELOPER: OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

PLAN & PROFILE
ALLEY D

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

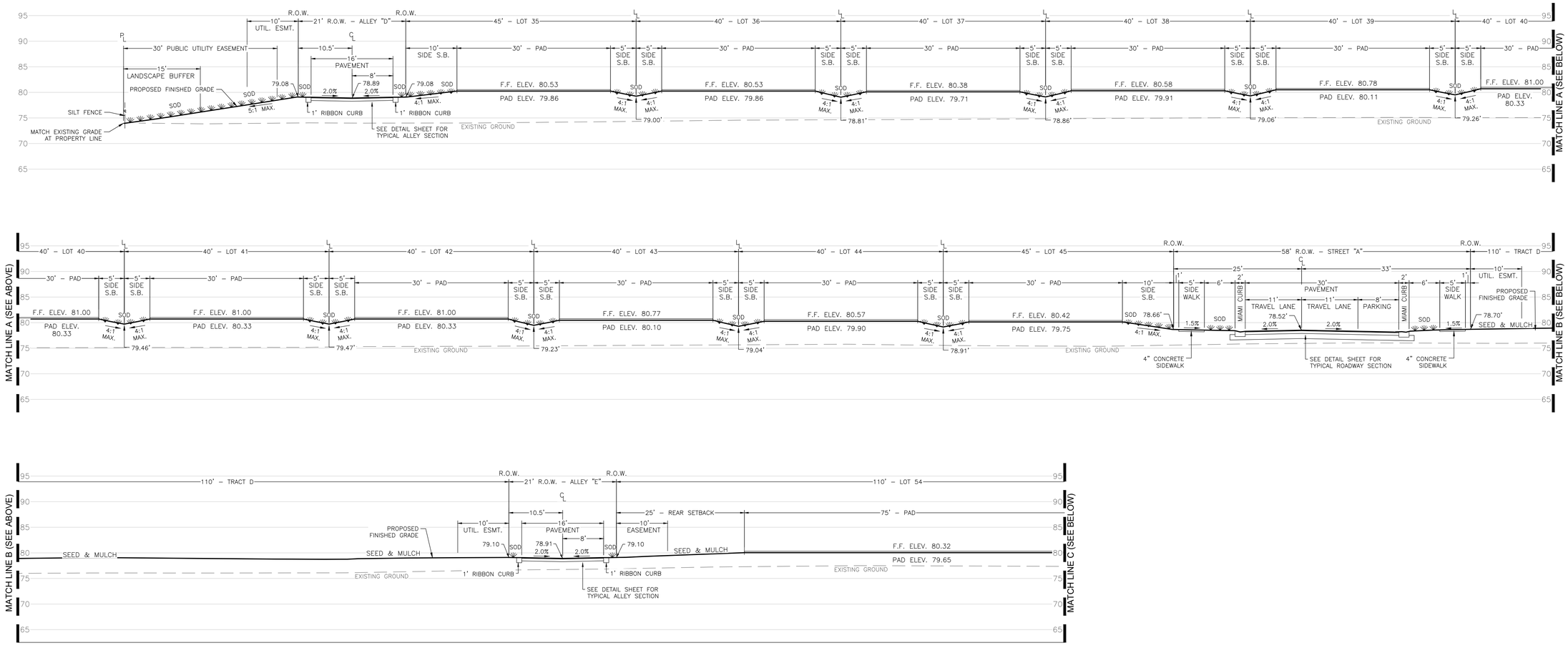
DATE
June 2025

DRAWN BY
TLK

PROJECT NUMBER
23-12

SCALE
1" = 50'

SHEET NUMBER
21



CROSS–SECTION A–A

SCALE 1" = 10'

NOTE: ALL FENCING, BUILDINGS, HARDSCAPE, LANDSCAPE AND IRRIGATION DESIGNED BY OTHERS

REVISION

DATE

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

SITE CROSS-SECTION A-A

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

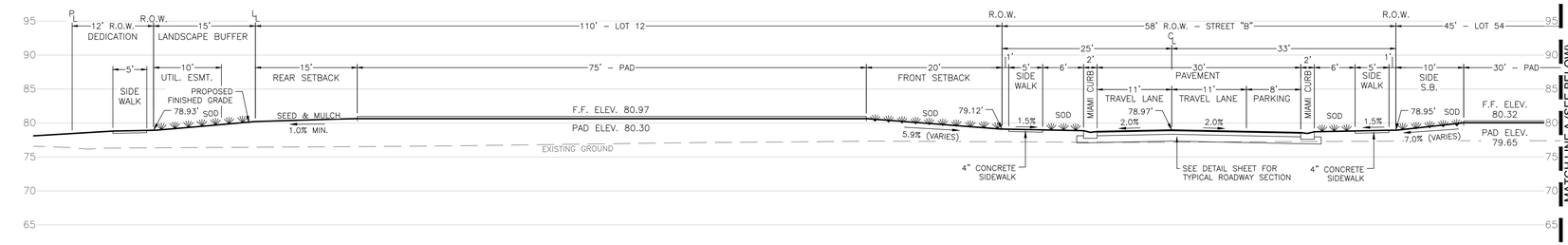
DATE
June 2025

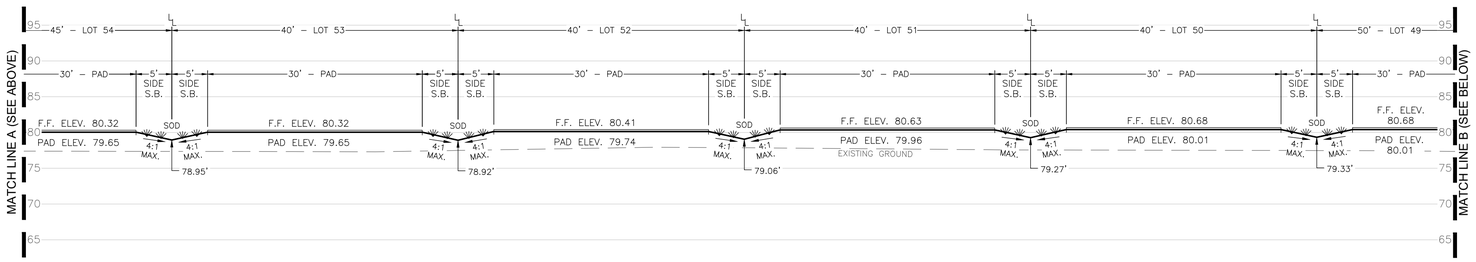
DRAWN BY
TLK/JMK

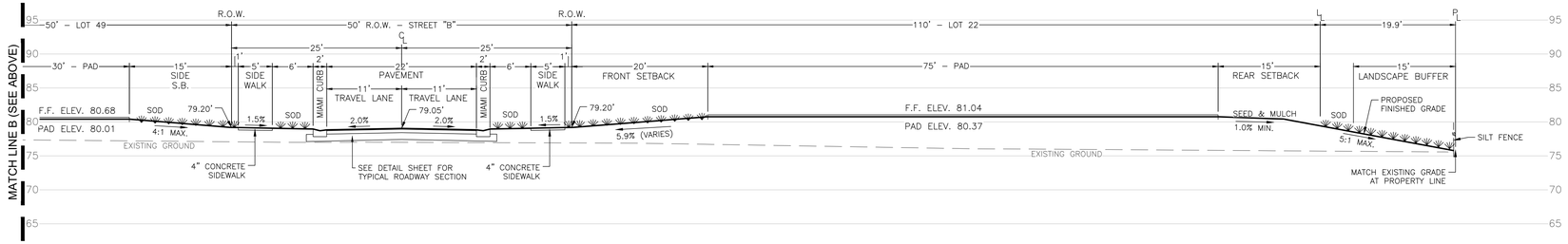
PROJECT NUMBER
23-12

SCALE
1" = 10'

SHEET NUMBER
22







CROSS–SECTION B–B

SCALE 1" = 10'

NOTE: ALL FENCING, BUILDINGS, HARDSCAPE, LANDSCAPE AND IRRIGATION DESIGNED BY OTHERS

REVISION

DATE

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

SITE CROSS-SECTION B-B

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

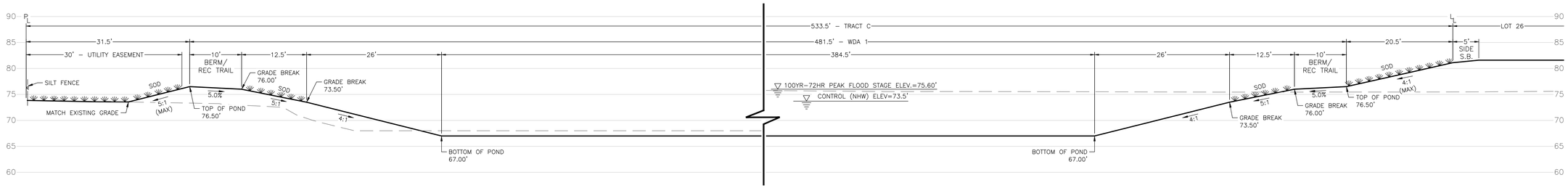
DATE
June 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

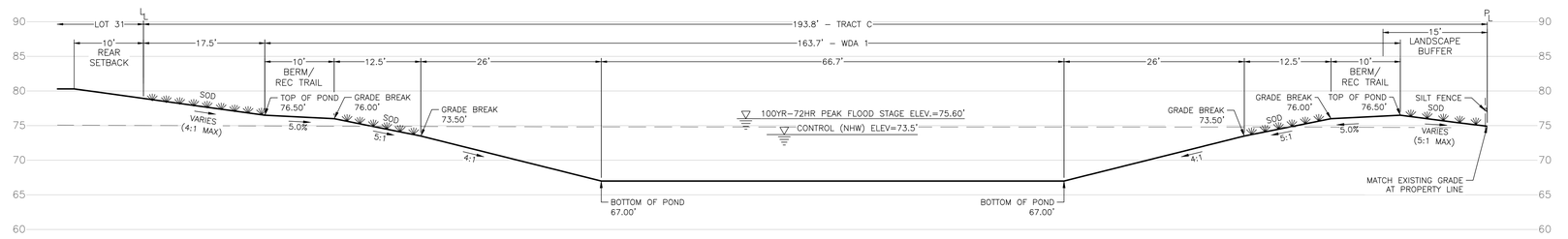
SCALE
1" = 10'

SHEET NUMBER
23



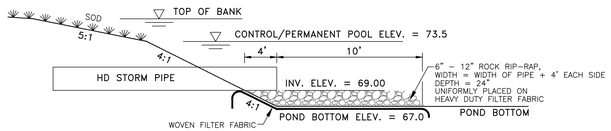
CROSS-SECTION C-C

SCALE 1" = 10'



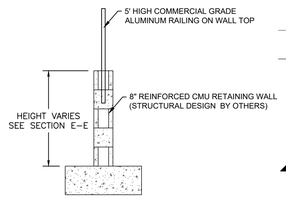
CROSS-SECTION D-D

SCALE 1" = 10'



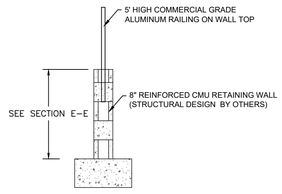
SUBMERGED PIPE END DETAIL

N.T.S



DETAIL F1

NOT TO SCALE



DETAIL F2

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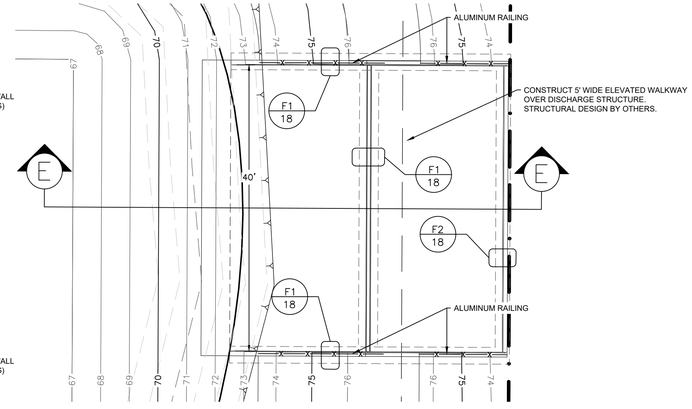
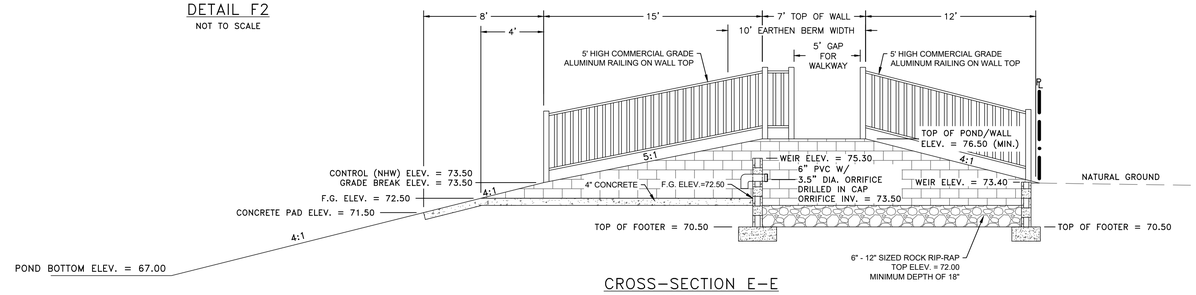


OVERFLOW WEIR DETAIL

SCALE 1" = 10'



CROSS-SECTION E-E

NOT TO SCALE

NOTE: ALL FENCING, BUILDINGS, HARDSCAPE, LANDSCAPE AND IRRIGATION DESIGNED BY OTHERS

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225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

SITE
CROSS-SECTIONS
C-C, D-D, AND E-E

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
June 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
NOTED

SHEET NUMBER
24

GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE TO FURNISH ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN CONFORMANCE WITH THE CITY OF ST. CLOUD SPECIFICATIONS AND ANY OTHER AGENCIES' SPECIFICATIONS AND REQUIREMENTS. THEY SHALL OBTAIN A COPY OF THE SOIL REPORT REFERENCED HEREIN AND VISIT THE SITE PRIOR TO BIDDING TO DETERMINE EXISTING CONDITIONS. THEY SHALL CLEAR AND GRUB ALL RIGHT-OF-WAYS, TRACTS AND APPROPRIATE EASEMENTS UNLESS OTHERWISE INDICATED, REMOVING TREES, STUMPS, ROOTS, MUCK, AND ALL OTHER DELETERIOUS MATERIAL.
2. THE EXACT LOCATIONS OF EXISTING UTILITIES ARE UNKNOWN. THE CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO BIDDING BY NOTIFYING THE UTILITY COMPANY TO LOCATE THEIR UTILITIES OR BY FIELD VERIFICATION. THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR ANY DAMAGED UTILITY RESULTING FROM THE CONTRACTOR'S CONSTRUCTION AT THE CONTRACTOR'S OWN EXPENSE.
3. THE REQUIREMENTS OF THE CITY OF ST. CLOUD STANDARD SPECIFICATIONS AND STANDARD DETAILS SHALL GOVERN ALL WORK. WHERE A CONFLICT EXISTS IN THE REQUIREMENTS OF A REFERENCED MATERIAL OR INSTALLATION STANDARD, THE REQUIREMENTS OF CITY OF ST. CLOUD SHALL PREVAIL. WHERE THE REQUIREMENTS OF A STATE OR LOCAL AGENCY HAVING JURISDICTION ARE MORE STRINGENT, THOSE REQUIREMENTS SHALL PREVAIL.
4. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE, AT ALL TIMES, ONE COPY OF THE CONTRACT DOCUMENTS INCLUDING STAMPED APPROVED PLANS, SPECIFICATIONS, AND ANY SPECIAL PROVISIONS, AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.
5. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER OF RECORD.
6. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL REQUIRED CONSTRUCTION PERMITS AND BONDS PRIOR TO CONSTRUCTION.
7. THE CONTRACTOR SHALL CONTACT ALL CONCERNED UTILITIES AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION OPERATIONS.
8. ALL COPIES OF REQUIRED TEST RESULTS ARE TO BE SENT TO THE CITY OF ST. CLOUD DIRECTLY FROM THE TESTING AGENCY.
9. ALL PAVING AND DRAINAGE TO BE CONSTRUCTED PER APPROVED PLANS PRIOR TO RECEIVING A CERTIFICATE OF OCCUPANCY.
10. ALL SIGNAGE TO BE PERMITTED BY SEPARATE INSTRUMENT.
11. THE CONTRACTOR MUST COMPLY WITH ALL TRENCH SAFETY STANDARDS.
12. THE SITE IS TO BE CLEARED AND GRUBBED.
13. ALL UNPAVED AREAS WITHIN THE CONSTRUCTION AREA AND RIGHT OF WAY SHALL BE SODDED WITH BAHIA GRASS AND/OR LANDSCAPED AS NOTED.
14. REFER TO PLANS FOR ALL EASEMENT REQUIREMENTS. EASEMENTS SHALL BE IN PLACE PRIOR TO THE CERTIFICATE OF COMPLETION BEING ISSUED.
15. THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR ANY DAMAGED RESULTING FROM THE CONTRACTOR'S CONSTRUCTION AT THE CONTRACTOR'S OWN EXPENSE.
16. SECTION 6 OF CITY OF ST. CLOUD LAND DEVELOPMENT CODE WILL BE UTILIZED IN CONJUNCTION WITH THESE DETAILS IN THE EVENT THAT THERE ARE CONFLICTING TERMS IN THE STANDARD DETAILS

AS-BUILT NOTES

THE CONTRACTOR SHALL SUBMIT A CERTIFIED SET OF AS-BUILT DRAWINGS TO THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING INFORMATION ON THE APPROVED PLANS CONCURRENTLY WITH CONSTRUCTION PROGRESS. RECORD DRAWINGS SUBMITTED TO THE ENGINEER AS PART OF THE PROJECT ACCEPTANCE SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:

A). DRAWINGS SHALL BE LEGIBLY MARKED TO RECORD ACTUAL CONSTRUCTION.

B). DRAWINGS SHALL SHOW ACTUAL LOCATION OF ALL UNDERGROUND AND ABOVE GROUND STORM DRAINAGE, WATER AND WASTEWATER PIPING AND RELATED APPURTENANCES. ALL CHANGES TO PIPING LOCATION INCLUDING HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES AND APPURTENANCES SHALL BE CLEARLY SHOWN AND REFERENCED TO PERMANENT SURFACE IMPROVEMENTS. DRAWINGS SHALL ALSO SHOW ACTUAL INSTALLED PIPE MATERIAL, CLASS, ETC.

C). DRAWINGS SHALL CLEARLY SHOW ALL FIELD CHANGES OF DIMENSION AND DETAIL INCLUDING CHANGES MADE BY FIELD ORDER OR BY CHANGE ORDER. DRAWINGS SHALL CLEARLY SHOW ALL DETAILS NOT ON THE ORIGINAL CONTRACT DRAWINGS, BUT CONSTRUCTED IN THE FIELD. ALL EQUIPMENT AND PIPING RELOCATION SHALL BE CLEARLY SHOWN.

D). LOCATION OF ALL INLETS, MANHOLES, HYDRANTS, VALVES AND VALVE BOXES SHALL BE SHOWN. ALL VALVES SHALL BE REFERENCED FROM AT LEAST TWO AND PREFERABLY THREE PERMANENT POINTS.

E). DIMENSIONS BETWEEN ALL INLETS AND MANHOLES SHALL BE FIELD VERIFIED AND SHOWN. THE INVERTS AND GRADE ELEVATIONS OF ALL INLETS AND MANHOLES SHALL BE SHOWN.

F). EACH SHEET OF THE PLANS SHALL BE SIGNED, SEALED AND DATED BY A REGISTERED SURVEYOR WITH A NOTE READING "THESE AS-BUILTS DRAWINGS ACCURATELY DEPICT THE ACTUAL IMPROVEMENTS AS CONSTRUCTED".

PAVING, GRADING & DRAINAGE NOTES

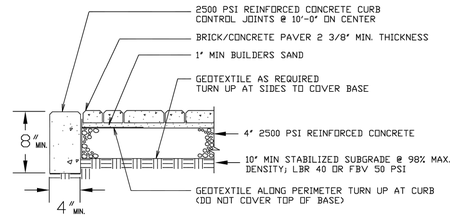
1. ALL ROADWAY AND PAVING CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST REVISION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, OSCEOLA COUNTY AND CITY OF ST. CLOUD STANDARDS.
2. THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED ON THE PLANS AND SHALL REGRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL A GRASS STAND IS WELL ESTABLISHED.
3. ALL PAVED AREAS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TYPICAL PAVING SECTIONS AS INDICATED.
4. WHERE NEW PAVEMENT MEETS THE EXISTING PAVEMENT, THE CONTRACTORS SHALL SAW-CUT THE EXISTING PAVEMENT FOR A SMOOTH AND STRAIGHT JOINT AND MATCH THE EXISTING PAVEMENT ELEVATIONS WITH THE PROPOSED PAVEMENT.
5. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL STORM DRAINAGE STRUCTURES TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL, PRIOR TO ORDERING MATERIALS.
6. THE CITY OF ST. CLOUD MAY BE RESPONSIBLE FOR THE MAINTENANCE OF THE STORMWATER SYSTEM IN ACCORDANCE WITH THE GUIDELINES SET FORTH BY THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT PERMIT. DOCUMENTS ARE ON FILE UNDER SFWMD PERMIT
7. ANY UNSUITABLE MATERIAL FOUND WITHIN LIMITS OF ROADWAY OR PAVEMENT SHALL BE REMOVED AND MAY BE USED FOR SHOULDER OR BEHIND CURB PLACEMENT.
8. ALL RUBBLE, CONCRETE SLABS, PAVEMENT, FOOTING MUCK, ORGANIC FINE SAND WITH ROOTS AND OTHER UNDESIRABLE MATERIALS SHALL BE REMOVED FROM THE SITE. THE UNDESIRABLE MATERIALS RESULTING FROM THE CLEARING OPERATION SHALL BE
9. DISPOSED OF IN A PROPER MANNER BEYOND THE LIMITS OF THE CLEARED SITE. ALL AREAS TO BE FILLED SHALL BE DONE WITH CLEAN, SUITABLE MATERIAL COMPRISED OF NON-PLASTIC SAND WITH LESS THAN ABOUT 12% FINES CONTENT. AND NOT CONTAINING ANY SIGNIFICANT AMOUNT OF ORGANIC SUBSTANCES (LESS THAN 3% BY WEIGHT) OR OTHER DELETERIOUS MATERIALS. FILL SHALL BE COMPACTED TO 98% DENSITY AS DETERMINED BY AASHTO T-180 AND 95% FOR AREAS BELOW ROAD SUBGRADE AS DETERMINED BY ASTM D-1557. FILL SHALL BE COMPACTED IN 12" MAX. LIFTS TO 98% OR 95% MAX. DENSITY.
10. UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL SOD ALL RETENTION AREAS AND ALL SIDE SLOPES AND OTHER DISTURBED AREAS ADJACENT TO DRAINAGE CONVEYANCE AREAS.

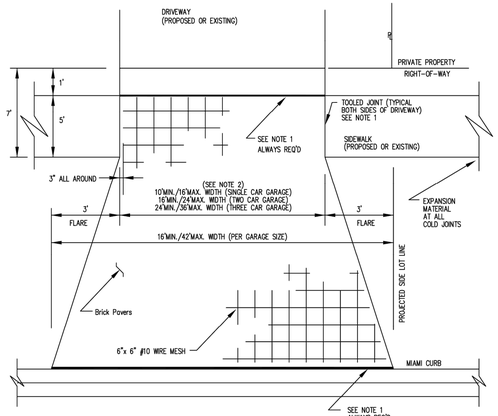
EROSION CONTROL
WATER QUALITY MANAGEMENT

1. THE CONTRACTOR MUST SELECT, IMPLEMENT, AND OPERATE ALL EROSION AND SEDIMENT CONTROL MEASURES REQUIRED TO RETAIN SEDIMENT ON-SITE AND TO PREVENT VIOLATIONS OF WATER QUALITY STANDARD AS SPECIFIED IN CHAPTERS 17-301, 17-302, 17-4, F.A.C. THE CONTRACTOR IS ENCOURAGED TO USE APPROPRIATE BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROLS AS DESCRIBED IN THE FLORIDA LAND DEVELOPMENT MANUAL: A GUIDE TO SOUND LAND AND WATER MANAGEMENT (DER, 1988).
2. THE CONTRACTOR SHALL CONTROL TURBID RUNOFF FROM THE PROJECT BY ROUGH EXCAVATING THE PROPOSED RETENTION AREAS IMMEDIATELY FOLLOWING CLEARING AND GRUBBING OPERATIONS. ALL DEWATERING DISCHARGE SHALL BE DIRECTED TO THESE AREA(S) FOR SETTLING PRIOR TO DISCHARGE OFF-SITE.
3. THE CONTRACTOR SHALL INSTALL WATER QUALITY CONTROL DEVICES ALONG THE SITE PERIMETER, AS DESIGNATED ON THESE PLANS. THE CONTRACTOR SHALL RECEIVE THE ENGINEER'S APPROVAL OF THE INSTALLATION PRIOR TO ANY OTHER SITE CONSTRUCTION.
4. ALL EROSION CONTROL/WATER QUALITY DEVICES SHALL BE IN ACCORDANCE WITH INDEXES 102 AND 103 OF THE LATEST EDITION OF THE FDOT "ROADWAY AND TRAFFIC DESIGN STANDARDS" SILT FENCES, HAY BALES, AND/OR TURBIDITY BARRIERS SHALL BE INSTALLED AT ALL OFF-SITE DISCHARGE POINTS. ALL EROSION CONTROL/WATER QUALITY DEVICES SHALL BE LEFT IN PLACE UNTIL THE DISTURBED AREAS ARE COMPLETELY STABILIZED AND/OR VEGETATED.
5. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SOIL MOISTURE TO PREVENT WIND GENERATED SOIL EROSION. ALL SURFACES DISTURBED FOR 30 OR MORE DAYS SHALL BE VEGETATED WITH A TEMPORARY OR PERMANENT COVER.

PAVER DRIVEWAY DETAIL

NTS





NOTES:
1. EXPANSION MATERIAL SHALL BE RECESSED 1/4" BELOW FINISHED CONCRETE W/ TOOLED JOINT RADIUS (#40 PRESSURE TREATED 1"x6" BOARD OR APROVED ALTERNATE MATERIAL.)
2. MIN. AND MAX. WIDTHS ARE FOR GARAGE SETBACKS OF 50' OR LESS. FOR SETBACKS GREATER THAN 50', USE 10' MIN. / 20' MAX
3. WIRE MESH SHALL HAVE 3" CLEARANCE FROM FORM BOARDS AND EDGE OF PAVEMENT.
4. FLARE IN RIGHT OF WAY SHALL NOT EXTEND BEYOND PROJECTED SIDE LOT LINE.
5. DRIVEWAY FINISHED GRADE SHALL BE 2" ABOVE GRADE OF LOT PRIOR TO SODDING. DRIVEWAY FINISHED GRADE SHALL BE 1" ABOVE GRADE OF LOT WHEN SEEDING/MULCHING.
6. SUBGRADE IS REQUIRED TO BE FIRM AND UNYEILDING MATERIAL WITH NO MUCK, PEAT, OR ANY ORGANINC MATERIAL.
7. CITY OF ST. CLOUD WILL NOT MAINTAIN, REPAIR, OR REPLACE ANY BRICK OR CONCRETE PAVERS LOCATED WITHIN THE CITY RIGHT OF WAY. IF THE PAVERS ARE REMOVED BY THE CITY OF ST. CLOUD PERSONNEL, THE PROPERTY OWNER IS RESPONSIBLE FOR REPLACING THE PAVERS. A RIGHT OF WAY PERMIT MUST BE APPLIED FOR AND APPROVED PRIOR TO WORKING WITHIN THE RIGHT OF WAY.
8. CHANGES TO THIS STANDARD DETAIL MUST BE APPROVED PRIOR TO CONSTRUCTION.

CONSTRUCTION EROSION CONTROL

An erosion control plan and a detailed description of the measure to be taken during construction to control erosion within the limits of the project, and to prevent the deposition of sediment in off-site systems or receiving water bodies, shall be submitted with final engineering construction plans of the development. Included with this submittal shall be calculations supporting the effectiveness of the proposed plans.

A. Erosion Control Plan

The erosion control plan, details and calculations shall document the measures necessary to limit the transport of sediment outside the limits of the project(s) to the volume and amount of that existing prior to the commencement of construction. This pre-construction condition shall be satisfied for the total anticipated construction period. Provision must be made to preserve the integrity and capacity of check weir, sediment basins, slope drains and grading patterns, required to meet this provision throughout the project construction life.

1. Temporary Fence

The erosion Control Plan shall include provisions for a temporary 6' foot fence suitable for mitigating wind erosion and for providing visual relief during construction. Fences shall withstand normal wind loads. The developer may in lieu of temporary fencing:

i. Erect the required buffer yard screens as required in the landscaping plans if it meets the intent of the erosion control plan.
ii. Disturb less than ten (10) acres and provide adequate means to control materials from leaving the construction site. Logical phasing of the disturbed areas will need to be shown on the erosion control plan if the site is larger than 10 acres.

B. Stockpiling Material

No excavated materials shall be stockpiled in such a manner as to direct runoff directly off the project site or into any adjacent water body or stormwater collection facility.

C. Exposed Area Limitation

The surface area of open, raw, erodible soil, exposed by clearing and grubbing operations, or excavation and filling operations, shall not exceed ten acres. This requirement may be waived for large projects with an a[pproved dust control plan, which demonstrate that opening of additional areas will not significantly affect off-site deposit of sediments. This waiver will be by written authorization from the City Engineer. Any violations of the dust control plan will result in the immediate voiding of this waiver and could result in the construction activities being suspended until the site is brought back into compliance.

D. Inlet Protection

Inlets and catch basins shall be protected from sediment-laden storm runoff until the completion of all construction operations that may contribute to the inlet.

E. Temporary Seeding and Mulching

Areas opened by construction operations, that are not anticipated to be dressed and receive final grassing treatment within thirty days, shall be seeded with a quick-growing grass species which will provide an early cover during the season in which it is planted, and will not later compete with permanent grassing. The rate of seeding shall be 30 pounds per acre. Slopes steeper than 4:1 shall receive mulching of approximately 2 inches loose measure of mulch material cut into the soil of the seeded area to a depth of four inches.

F. Temporary Grassing

As required by the City of St. Cloud, the seed or seeded and mulched area shall be rolled and watered to assure optimum growing conditions, for the establishment of a good grass cover.

G. Temporary Regrassing

If, after fourteen days, the temporary grassed areas have not attained a minimum of 75% good grass cover, the area will be reworked and additional seed applied sufficiently to establish the desired vegetative cover. 75% of good stand of grass must be established within 30 days of the initial treatment or area shall be sodded.

H. Maintenance

All features of the project designed and constructed to prevent erosion and sediment, shall be maintained during the project construction life, so as to function as they were originally designed and constructed. The contractor is responsible for keeping any temporary grass in a mowed condition.

Permanent Erosion Control

The erosion control facilities of the project shall be designed to minimize the impact of off-site facilities. All stormwater discharge from the project limits shall be routed through detention basins to trap suspended sediments, and discharge facilities from these basins shall be provided with a skimming device to trap floatable debris.
A copy of the site's FDEP NPDES permit shall be provided to the Public Works Department prior to a Notice to Proceed being issued.

A. Permanent Seeding

All areas which have been disturbed by construction shall, at a minimum, be fertilized and seeded in accordance with City of St. Cloud Road Construction Specification.

B. Permanent Seeding and Mulching

In addition to the minimum requirements above, slopes from 6:1 to 3:1, inclusive, will be mulched with a uniform thickness of approximately two inches, loose measure, of mulch material incorporated into the soil by mixing to a depth of four inches.

C. Permanent Sodding

All retention/detention basins shall be solid sodded. All exposed areas, including public rights-of-way, with slopes steeper than 4:1 shall be solid sodded.

D. Strip Sodding

Strip sod, 1 foot wide or greater, shall be placed adjacent to all curbs, walkways and pavement. In areas with a sidewalk, the entire area between the sidewalk and the back of curb, and/or pavement, shall be sodded.

E. Regrassing

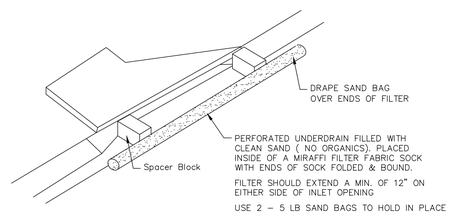
All grassed areas will be maintained to assure a good stand and sufficient ground cover to minimize erosion. If, after 60 days, an adequate ground cover has not been established, the area with be regressed.

F. Additional Fertilizer

Grassed areas, not accepted within 90 days of their completion, shall be re-fertilized at an application rate of 250 lb. per acre.

G. Maintenance

Prior to the project being accepted by the City, the contractor is responsible for mowing the grass to remain in compliance with the City Code.



TEMPORARY SEDIMENT TRAP NOTES:
1. FIBROUS FILLER MATERIAL IN FRONT OF BLOCK PREVENTS GRAVEL FROM WASHING INTO STRUCTURE
2. 2"X4" BEHIND BLOCK AND ACROSS THROAT HELPS KEEP BLOCK IN PLACE. PLACE IN OUTER HOLE OF SPACER BLOCK.

TEMPORARY SEDIMENT TRAP AT CURB INLET

NOT TO SCALE

REVISION | DATE

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
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OLD HICKORY TREE ESTATES

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OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

CITY OF ST. CLOUD NOTES AND DETAILS

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

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June 2025

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SCALE
NONE

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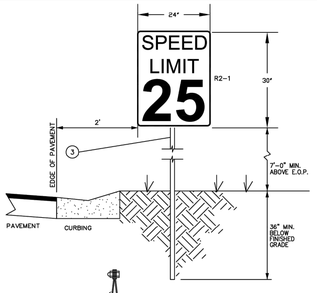
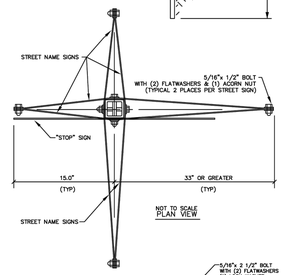
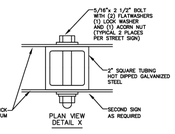
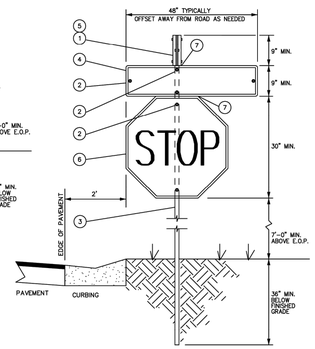




NOT TO SCALE
PLAN VIEW



PLAN VIEW DETAIL X



FRONT ELEVATION
NOT TO SCALE

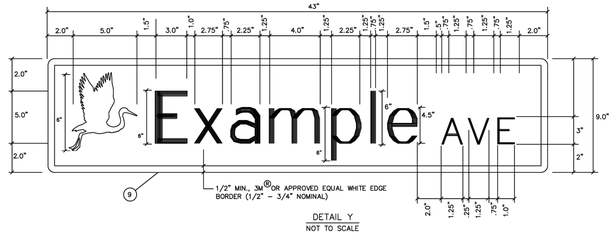
LEGEND:
(3) = SEE NOTE 3

NOTES FOR DUAL STREET SIGN WITH STOP SIGN:

1. STREET SIGN LENGTH TO BE 24" MINIMUM & 60" MAXIMUM. LONGER SIGNS BY SPECIAL PERMISSION FROM THE CITY ONLY. STREET NAME SIGNS MAY BE ON SEPARATE POST INSTALLATIONS WHEN REQUIRED USE 3M® OR APPROVED EQUAL BLUE FACE SHEETING MATERIAL WITH 1/2" WHITE BORDER ON EDGE OF FACE
2. STAINLESS STEEL FLATWASHER TO FACE EACH SIDE; ADDITIONAL LOCKWASHER TO GO BETWEEN ACORN NUT & FLATWASHER ON OPPOSITE SIDE FROM BOLT HEAD. USE ALL STAINLESS STEEL FASTENERS. ALL HOLES TO BE 13/16" DIA. MIN. TO 7/16" DIA. MAX. HOLES ON END OF STREET SIGN FOR REQUIRED PINNING OF (2) SIGNS TOGETHER
3. SIGN POST SHALL BE 2" (OUTSIDE) SQUARE TUBING, HOT DIP GALVANIZED, PRE-PUNCHED, 12 GA. STEEL POST SHALL BE 14' MIN. TOTAL LENGTH, ONE PIECE. "STOP" SIGN SHALL BE 7' (MIN.) ABOVE E.O.P. AT 2' CLEAR FROM E.O.P. TO EDGE OF STOP SIGN FACE. POST TO BE SET 3' MIN. IN GROUND, AND EARTH PACKED FIRMLY AROUND POST END WITH TAMPING ROD
4. LOWER STREET SIGN SHALL NOT BE MOUNTED PERPENDICULAR TO "STOP" SIGN FACE; THESE TWO SIGN SURFACES ARE TO OCCUPY THE SAME VERTICAL PLANE
5. TOP END OF SIGN POST SHALL MEET TOP EDGE OF TOP SIGN
6. "STOP" SIGN FACE SHALL BE 3M® OR APPROVED EQUAL, "HIGH INTENSITY."
7. ALL SIGNS SHALL BE ALUMINUM BLANKS, 0.063" THK. FOR STREET SIGNS, 0.080" THK. FOR STOP SIGNS, 3M® OR APPROVED EQUAL COVERED
8. SIGNING LAYOUT REQUIREMENTS:

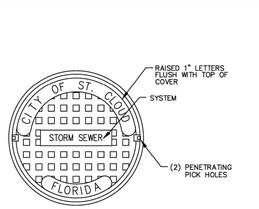
	"STREET NAME" SHOWN
TYPICAL STROKE .75"	6.0" "C" SERIES, UPPER CASE
TYPICAL SINGLE GAP .75"	4.5" "C" SERIES, LOWER CASE
TYPICAL GAP & A HALF 1.25"	5.0" "C" SERIES, UPPER CASE
TYPICAL DOUBLE GAP 1.50"	

9. DETAIL "Y" SHOWS REQUIRED USE OF THE 5" SERIES "D" UPPER CASE LETTER WITH 4" LOWER CASE LETTERS FOLLOWING THE INITIAL LETTER OF THE STREET NAME
   PUBLIC ROAD SIGNS SHALL HAVE A BLUE BACKGROUND WITH WHITE LETTERING. PRIVATE ROAD SINGS SHALL HAVE A WHITE BACKGROUND WITH BLUE LETTERING.
10. SHEETING: ALL SHEET MATERIAL SHALL BE 3M® BRAND OR APPROVED EQUAL. INK SCREENED STREET NAME SIGNS SHALL BE 3M® OR APPROVED EQUAL INK.
11. INSPECTION: ALL ERECTED STREET NAME SIGN MATERIAL SHALL BE SUBJECT TO REJECTION.
12. SPEED LIMIT SIGNS INDICATING THE STATUTORY SPEED LIMITS SHALL BE INSTALLED AT THE ENTRANCES. ADDITIONAL SIGNS MAY BE REQUIRED BY THE CITY MANAGER OR DESIGNEE.

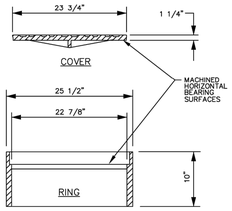


DETAIL Y
NOT TO SCALE

OFF STREET PARKING STALL REQUIREMENT TABLE				
PARKING ANGLE	WIDTH OF STALL	DEPTH OF STALL	MINIMUM WIDTH OF TRAVELWAY	LENGTH OF CURB PER CAR
COMMERCIAL 0°	10'-0"	23'-0"	24'-0"	23'-0"
COMMERCIAL 45°	10'-0"	19'-10"	16'-0"	12'-9"
COMMERCIAL 60°	10'-0"	21'-0"	18'-0"	10'-5"
COMMERCIAL 90°	10'-0"	20'-0"	24'-0"	10'-0"
RESIDENTIAL	8'-0"	20'-0"	10'-0"	
ADA ACCESSIBLE PARKING	12'-0"	20'-0"	AS COMMERCIAL ABOVE	

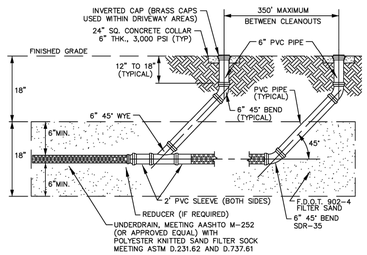


PLAN

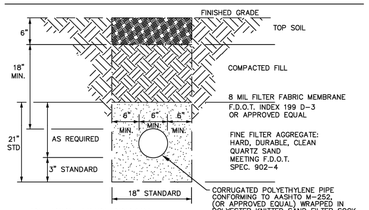


RING & COVER NOTES:
1. RING & COVER TO BE USF 1182 OR APPROVED EQUAL
2. RING & COVER TO BE USF 195E OR APPROVED EQUAL FOR "BUILD UP" TYPE (SEE DWG# 12001)

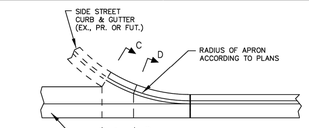
FLUSH MOUNT RING & COVER



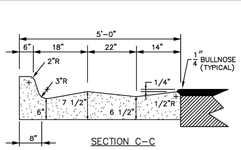
UNDERDRAIN CLEANOUT DETAIL
NOT TO SCALE



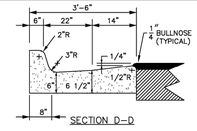
PE PIPE UNDERDRAIN
NOT TO SCALE



PLAN

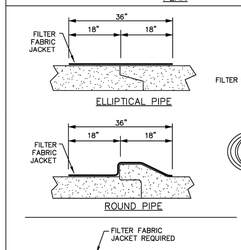


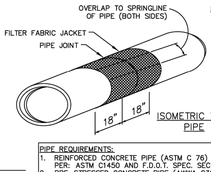
SECTION C-C



SECTION D-D

VALLEY GUTTER TRANSITION
NOT TO SCALE



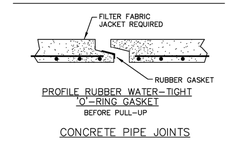


ISOMETRIC VIEW
PIPE

PIPE JOINT NOTES:
1. ALL JOINTS OF ALL PIPE SHALL BE WRAPPED WITH FILTER FABRIC WHICH SHALL EXTEND A MINIMUM OF 18" ON BOTH SIDES OF JOINT (FILTER FABRIC PER F.D.O.T. INDEX 199 D-3)
2. FILTER FABRIC SHALL OVERLAP ON TOP OF PIPE DOWN TO SPRING LINE OF PIPE ON BOTH SIDES
3. ALL STORM DRAINAGE PIPE SHALL BE A MINIMUM 15" DIAMETER PIPE OR ITS HYDRAULIC EQUIVALENT 12" X 18" E.R.C.P.
4. CONFLICT STRUCTURES SHALL BE APPROVED ON A CASE BY CASE BASIS
5. ALL STORM INLETS, CATCH BASINS & MANHOLES SHALL BE PRECAST CONCRETE SEE F.D.O.T. ROAD & TRAFFIC DESIGN STANDARDS (LATEST EDITION)

* (EXTERIOR WALL JOINTS SHALL BE WRAPPED WITH CON-WRAP, E-Z WRAP OR APPROVED EQUAL)

FILTER FABRIC JACKET FOR PIPE JOINTS

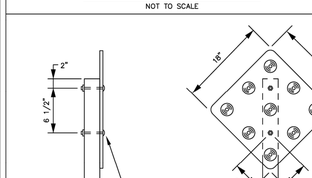


PROFILE RUBBER WATER-TIGHT 'O'-RING GASKET
BEFORE PULL-UP

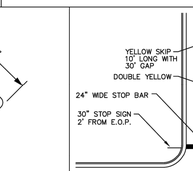
CONCRETE PIPE JOINTS

PIPE REQUIREMENTS:
1. REINFORCED CONCRETE PIPE (ASTM C 76) CLASS III OR STRONGER BASED ON "D" LOAD; OR FRCP (FIBER-MIX) CONCRETE PIPE; PER: ASTM C1450 AND F.D.O.T. SPEC. SECTION 941., OR LATEST EDITION.
2. PRE-STRESSED CONCRETE PIPE (AWWA C301) SHALL BE APPROVED ON A CASE BY CASE BASIS
3. ALTERNATIVE PIPE MATERIALS MAY BE USED FOR PRIVATELY MAINTAINED STORMWATER SYSTEMS.

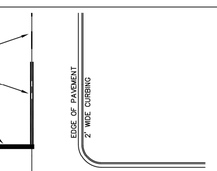
GENERAL NOTES:
1. ALL PAVEMENT MARKINGS AND TRAFFIC CONTROLS SHALL COMPLY WITH THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (M.U.T.C.D.), LATEST EDITION AS PUBLISHED BY FEDERAL HIGHWAY ADMINISTRATION.
2. HANDICAP RAMPS SHALL COMPLY WITH THE "AMERICANS WITH DISABILITIES ACT" OF 1992
3. ALL PAVING AND DRAINAGE STRUCTURES (INCLUDING CURBING) SHALL COMPLY WITH F.D.O.T. "STANDARDS FOR ROAD AND BRIDGE CONSTRUCTION," LATEST EDITION.
4. RECORDINGS FROM CLOSED CIRCUIT TELEVISION INSPECTIONS CONDUCTED BY A CONTRACT TV INSPECTOR EMPLOYED BY THE DEVELOPER SHALL BE PROVIDED TO THE CITY ON A DVD AND INCLUDE A WRITTEN REPORT CORRESPONDING TO THE DVD RESULTS. A POST CLOSED CIRCUIT TELEVISION INSPECTION SHALL BE REQUIRED BY THE DEVELOPER PRIOR TO THE EXPIRATION OF THE MAINTENANCE BOND.



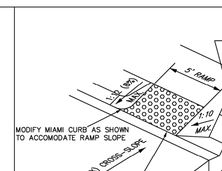
PARKING WHEEL STOP DETAIL
NOT TO SCALE



MIAMI CURB SECTION
NOT TO SCALE

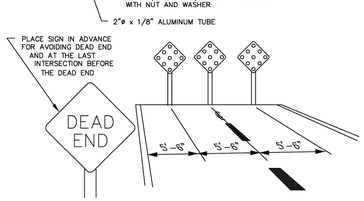


TYPE "F" CURB SECTION
NOT TO SCALE



VALLEY GUTTER SECTION
NOT TO SCALE

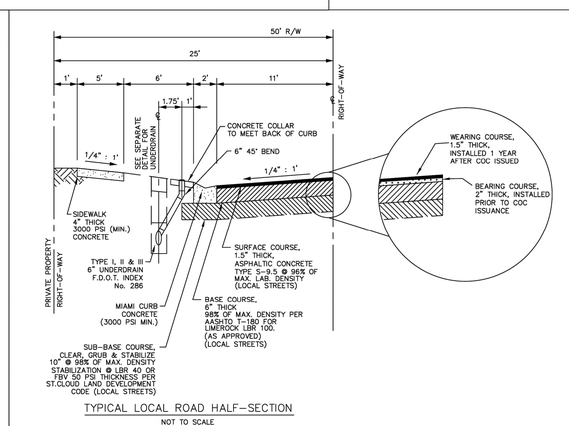
CURB NOTES
1. ALL CONCRETE CURB SHALL BE CONTINUOUSLY CURED FOR A PERIOD OF NOT LESS THAN 72 HOURS. SEE F.D.O.T. ROAD & BRIDGE SPECIFICATIONS (LATEST EDITION) SEC. 520-8



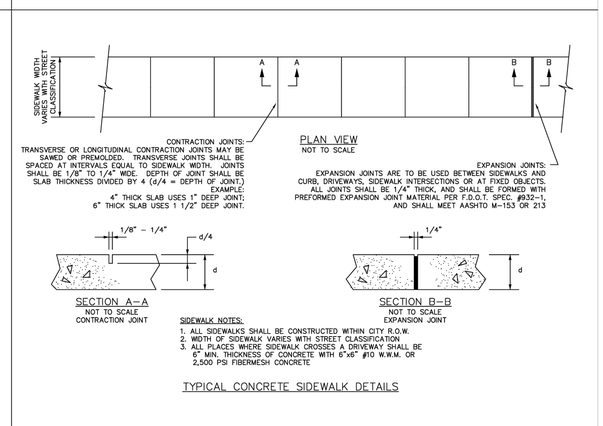
INTERSECTION STRIPING DETAIL
SHALL MEET MINIMUM CURRENT A.D.A. AND F.D.O.T. STD. SPECS.

CROSS-SECTION

CURB RAMP DETAIL
SHALL MEET MINIMUM CURRENT A.D.A. AND F.D.O.T. STD. SPECS.



TYPICAL LOCAL ROAD HALF-SECTION
NOT TO SCALE



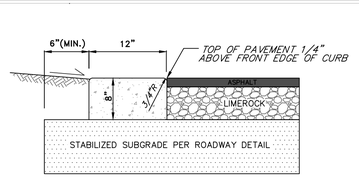
PLAN VIEW
NOT TO SCALE

SECTION A-A
NOT TO SCALE
CONTRACTION JOINT

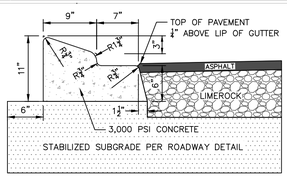
SECTION B-B
NOT TO SCALE
EXPANSION JOINT

SIDEWALK NOTES:
1. ALL SIDEWALKS SHALL BE CONSTRUCTED WITHIN CITY R.O.W.
2. WIDTH OF SIDEWALK VARIES WITH STREET CLASSIFICATION
3. ALL PLACES WHERE SIDEWALK CROSSES A DRIVEWAY SHALL BE 6" MIN. THICKNESS OF CONCRETE WITH 6"x6" #10 W.W.M. OR 2,500 PSI FIBERMESH CONCRETE

TYPICAL CONCRETE SIDEWALK DETAILS



RIBBON CURB DETAIL
NOT TO SCALE



TYPE A CURB DETAIL
NOT TO SCALE

REVISION | DATE

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

CITY OF ST. CLOUD NOTES AND DETAILS

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
June 2025

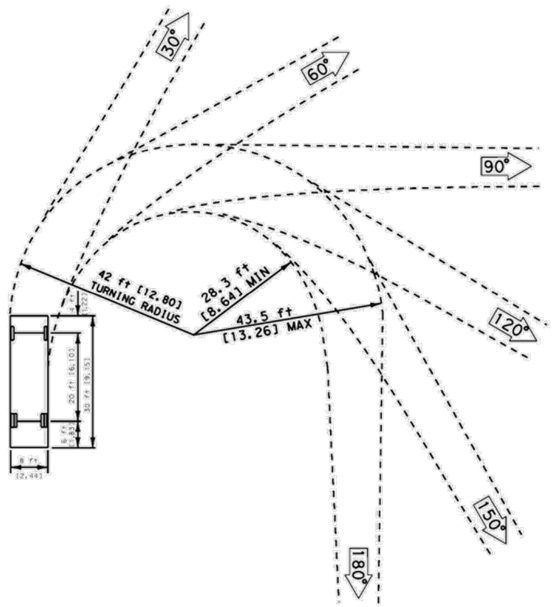
DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
NONE

SHEET NUMBER
26

SINGLE UNIT (SU) TRUCK DESIGN VEHICLE
TURNING RADIUS = 42 ft [12.80 m]
SCALE =1:20 [1:200]



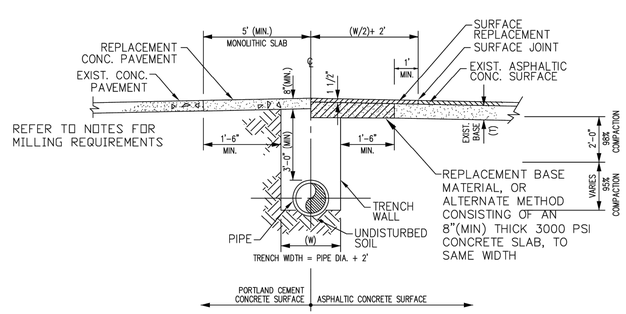
Turning Template for Single Unit Trucks or Buses

PARAMETERS:

1.	INSIDE CRAMP ANGLE	40 DEGREE
2.	AXLE TRACK	82.92 INCHES
3.	WHEEL OFFSET	5.3 INCHES
4.	TREAD WIDTH	17.5 INCHES
5.	CHASSIS OVERHANGE	78 INCHES
6.	ADDITIONAL BUMPER DEPTH	19 INCHES
7.	FRONT OVERHANG	136.1 INCHES
8.	WHEEL BASE	267.5 INCHES

CALCULATED TURN RADII:

1.	INSIDE TURN	25FT 5 INCHES
2.	CURB TO CURB	41 FEET 5 INCHES
3.	WALL TO WALL	48 FEET 3 INCHES



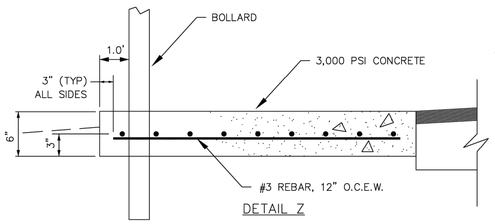
STANDARD ROADWAY OPEN CUT DETAIL
NTS

BEDDING AND TRENCHING NOTES:

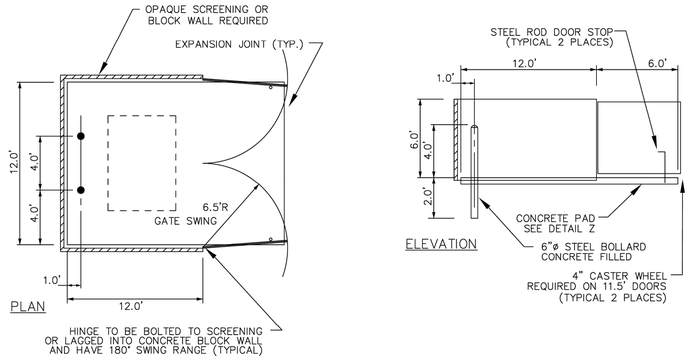
1. TRENCH TO BE BACKFILLED WITH SUITABLE MATERIAL IN ONE (1) FOOT LIFTS AND COMPACTED TO 98% DENSITY (AASHTO-T-180)
2. FLOW-ABLE FILL CAN BE UTILIZED AS AN ALTERNATIVE. FLOW-ABLE FILL WILL BE 80 PSI WITH ASTM C-494, TYPE C ACCELERATOR TO OBTAIN A SETTING TIME OF 3-4 HOURS
3. FOLLOW THE LATEST EDITION OF FDOT STANDARDS FOR ROAD AND BRIDGE AND DESIGN STANDARDS
4. ALL EXCAVATIONS SHALL BE PERFORMED IN ACCORDANCE WITH O.S.H.A. TRENCH SAFETY REQUIREMENTS.
5. IF THE EXISTING PAVEMENT CONTAINS FC, THE MILLING DEPTH WILL BE INCREASED FOR THE FC THICKNESS.
6. OPEN CUTS IN ROADS NEWER THAN 5 YEARS, WILL REQUIRE THE CITY ENGINEERS APPROVAL. ALTERNATE REPAIR METHODS MAY APPLY.
7. MATCH EXISTING PAVEMENT MINIMUM OF 3" TYPE S ASPHALT.
8. MILL AND OVERLAY CONDITIONS SHALL BE PREPARED AS SPECIFIED WITHIN

25 TO 45 MPH ---- 20FT EACH SIDE
45 TO 55 MPH ---- 50FT EACH SIDE
55 & > --------- 100ft EACH SIDE

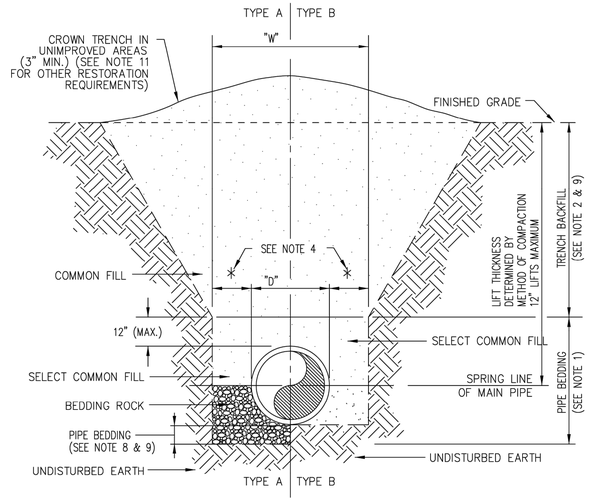
9. ALL STRIPPING, REFLECTORS OR OTHER MARKINGS OBLITERATED BY OVERLAYING SHALL BE RESTORED IN ACCORDANCE WITH F.D.O.T. STANDARDS PRIOR TO INITIAL ACCEPTANCE BY THE CITY OF ST. CLOUD



SINGLE DUMPSTER PAD DETAIL
NTS



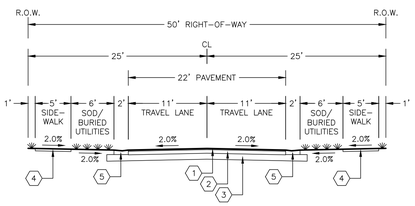
DUMPSTER PAD NOTES:
1. FOR MULTIPLE DUMPSTERS ON A SINGLE PAD, SCREENING SHALL BE REQUIRED AROUND THE PERIMETER OF THE PAD.
2. DUMPSTER PADS WITH MULTIPLE DUMPSTER WILL BE APPROVED ON A CASE BY CASE BASIS.
2. DUMPSTER ENCLOSURES SHALL HAVE A MINIMUM INSIDE DIMENSION OF 12'X12' MEASURED FROM INTERIOR WALL TO INTERIOR WALL.



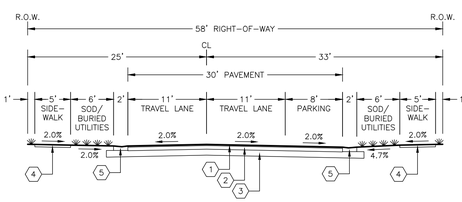
BEDDING AND TRENCHING DETAIL
NTS

BEDDING & TRENCHING NOTES:

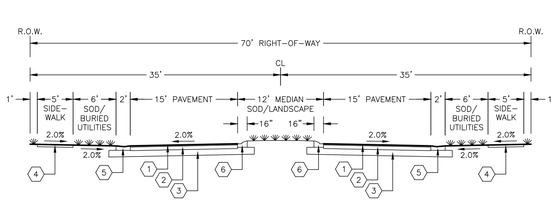
1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180. COMPACTION SHALL BE 98% WITHIN 2' OF FINISHED ELEVATION UNDER ALL ROADWAYS, AND TO 2 LF BEHIND CONCRETE CURBS OR THE EDGE OF PAVEMENT.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180. COMPACTION SHALL BE 98% WITHIN 2' OF FINISHED ELEVATION UNDER ALL ROADWAYS, AND TO 2 LF BEHIND CONCRETE CURBS OR THE EDGE OF PAVEMENT.
3. USE TYPE A BEDDING TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CITY.
4. * 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. ALL NECESSARY MEASURES SHALL BE TAKEN TO KEEP THE TRENCH AS DRY AS POSSIBLE DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. REFER TO LAND DEVELOPMENT CODE FOR SHEETING AND BRACING IN EXCAVATIONS. GRAVITY SEWERS SHALL UTILIZE TYPE A BEDDING, IF REQUIRED BY THE CITY.
8. GRAVITY SEWERS SHALL UTILIZE A TYPE A BEDDING, IF REQUIRED BY THE CITY. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER LESS THAN 15", AND 6" MINIMUM FOR PIPE DIAMETER 16" AND LARGER.
9. THE CITY ENGINEER MAY APPROVE ALTERNATE METHODS OF TRENCH BACKFILL COMPACTION ON A CASE BY CASE SITUATION.
10. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. THE CITY SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.
11. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN THE CITY OF ST. CLOUD RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.



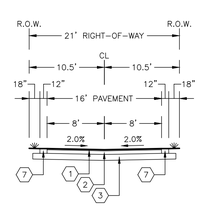
TYPICAL ROADWAY SECTION
SCALE 1" = 10'



TYPICAL ROADWAY W/PARKING ON ONE SIDE SECTION
SCALE 1" = 10'



TYPICAL ENTRANCE ROADWAY SECTION
SCALE 1" = 10'



TYPICAL ALLEY SECTION
SCALE 1" = 10'

KEY

1. 1½" TYPE S-9.5 ASPHALTIC CONCRETE SURFACE COURSE @ 96% OF MAX. LAB. DENSITY
2. 6" LIMEROCK BASE COURSE @ 98% OF MAX. DENSITY PER AASHTO T-180, LBR 100
3. 10" CLEARED, GRUBBED AND STABILIZED BASE COURSE @ 98% OF MAX. DENSITY STABILIZATION, LBR 40 OR FBV 50 PSI THICKNESS (PER ST. CLOUD LDC) EXTENDED 12" BEYOND THE BACK OF CURB
4. 4" SIDEWALK, MIN. 3,000 PSI CONCRETE
5. MIAMI CURB, MIN. 3,000 PSI CONCRETE
6. FDOT TYPE A CURB, MIN. 3,000 PSI CONCRETE
7. RIBBON CURB, MIN. 3,000 PSI CONCRETE

REVISION | DATE

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES
SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

CITY OF ST. CLOUD NOTES AND DETAILS

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
June 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
NONE

SHEET NUMBER
27

TOHO WATER AUTHORITY GENERAL CONSTRUCTION NOTES

GENERAL:

1. CONSTRUCT UTILITIES IN ACCORDANCE TO TOHO APPROVED PLANS AND SHOP DRAWINGS. ANY DEVIATION FROM THE APPROVED PLANS SHALL BE APPROVED BY THE DEVELOPER'S ENGINEER AND TOHO.
2. A PRECONSTRUCTION MEETING WITH THE TOHO'S STAFF IS REQUIRED PRIOR TO INITIATING CONSTRUCTION.
3. ALL REQUIRED PERMITS SHALL BE OBTAINED PRIOR TO INITIATING CONSTRUCTION.
4. A MINIMUM 12 FOOT WIDE ACCESS ROAD SHALL BE PROVIDED FOR ALL TOHO OWNED UTILITIES, WHICH ARE LOCATED OUTSIDE OF ROADWAYS. THE TOP 8" OF THE ACCESS ROAD SHALL BE STABILIZED TO A FLORIDA BEARING VALUE OF 75 PSI, AND COMPACTED TO 98% OF AASHTO T-180.
5. PIPE DEFLECTION CANNOT EXCEED 25% OF THE PIPE MANUFACTURER'S RECOMMENDATION.
6. REFERENCE TOHO'S STANDARDS, SPECIFICATIONS AND DETAILS, LATEST EDITION FOR ISSUES NOT SPECIFICALLY ADDRESSED BELOW OR ON THE TOHO ACCEPTED CONSTRUCTION PLANS.
7. CURRENT EDITION OF TOHO'S STANDARDS, SPECIFICATIONS AND DETAILS, AT TIME OF TOHO PLAN ACCEPTANCE SHALL SUPERSEDE ACCEPTED PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE TOHO STANDARDS, SPECIFICATIONS AND DETAILS ARE ADHERED TO IN CONSTRUCTION.

PERMITS, PLANS, SHOP DRAWINGS:

1. PERMITS OR LETTERS OF DETERMINATION FROM FDEP SHALL BE OBTAINED FOR THE SANITARY SEWER COLLECTION SYSTEM AND WATER DISTRIBUTION SYSTEM PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. A STAMPED ACCEPTED SET OF PLANS BY TOHO SHALL BE PRESENT ON THE SITE AT ALL TIMES. ACCEPTED PLANS ARE VALID FOR 12 MONTHS FROM THE DATE OF PLAN ACCEPTANCE. IF CONSTRUCTION DOES NOT BEGIN WITHIN THIS 12 MONTH PERIOD, THE DEVELOPER MUST CONTACT TOHO FOR A PROJECT STATUS REVIEW AND POSSIBLE APPROVAL FOR EXTENSION.
3. SHOP DRAWINGS FOR ALL WATER, REUSE, AND SANITARY SEWER MATERIALS AND STRUCTURES SHALL BE SUBMITTED TO TOHO PRIOR TO INITIATING CONSTRUCTION.
4. INSTALLATION OF MATERIALS AND/OR STRUCTURES PRIOR TO SHOP DRAWING APPROVAL IS DONE AT THE CONTRACTOR'S OWN RISK.
5. TWO HARD COPIES AND ONE ELECTRONIC COPY OF RECORD DRAWINGS SHALL BE SUBMITTED TO TOHO BEFORE THE FINAL INSPECTION. RECORD DRAWINGS SHALL CONFORM TO SECTIONS 11.6 OF TOHO'S STANDARDS, SPECIFICATIONS AND DETAILS, LATEST EDITION.

POTABLE WATER AND REUSE WATER – TESTING:

1. WATER LINE SHALL BE INSTALLED, CLEANED, FLUSHED, DISINFECTED AND BACTERIOLOGICALLY TESTED AND CLEARED FOR SERVICE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND FDEP RULES AND REGULATIONS.
   ALL WATER DISTRIBUTION SYSTEMS SHALL BE FLUSHED CLEAN OF ALL DELETERIOUS MATERIAL PRIOR TO ANY TESTING. LINES 4" AND GREATER SHALL BE PIGGED.
2. WATER LINE SHALL BE PRESSURE TESTED IN ACCORDANCE WITH AWWA-C600 (DUCTILE IRON PIPE) AND AWWAC605/M23 (PVC PIPE) SPECIFICATIONS AT 150 PSI AND WITNESSED BY TOHO PERSONNEL. NO LEAKAGE SHALL BE ALLOWED.
3. ALL TAPPING SADDLES AND SLEEVES SHALL BE PRESSURE TESTED AT 150 PSI AND WITNESSED BY TOHO PERSONNEL PRIOR TO INITIATING THE TAP.
4. ALL WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH THE LATEST VERSION OF AWWA C651 AND WITNESSED BY TOHO PERSONNEL
5. ALL BACTERIOLOGICAL SAMPLES SHALL BE WITNESSED BY TOHO PERSONNEL

WATER – MATERIALS:

1. PVC PIPE: FOUR (4) INCHES THROUGH TWELVE (12) INCHES SHALL BE AWWA C-900, LATEST EDITION. FOURTEEN (14) INCHES THROUGH THIRTY-SIX (36) INCHES SHALL BE AWWA C-905, LATEST EDITION.
2. DIP PIPE: FOUR (4)" THROUGH FIFTY-FOUR (54)" SHALL BE ANSI/AWWA A21.51/C151 WITH A MINIMUM WORKING PRESSURE CLASS 150 PIPE.

   ANY FITTINGS REQUIRED SHALL BE MECHANICAL JOINT DUCTILE IRON CONFORMING TO ANSI/AWWA A21.10/C110, 250 PSI MINIMUM PRESSURE RATING, OR DUCTILE IRON COMPACT FITTINGS IN ACCORDANCE WITH ANSI/AWWA A21.53/C153.

   JOINTS FOR DUCTILE IRON PIPE SHALL BE PUSH-ON OR MECHANICAL JOINTS CONFORMING TO ANSI/AWWA A21.11/C111. ABOVE GROUND JOINTS SHALL BE FLANGED WITH STAINLESS STEEL BOLTS, NUTS AND WASHERS. FLANGED JOINTS SHALL CONFORM TO ANSI STANDARD B 16.1-125 LB.

   WHERE DUCTILE IRON PIPE AND FITTINGS ARE TO BE BELOW GROUND OR INSTALLED IN A CASING PIPE THE COATING SHALL BE A MINIMUM 1.0 MIL THICK IN ACCORDANCE WITH ANSI/AWWA A21.51/C151.

   WHERE DUCTILE IRON PIPE AND FITTINGS ARE TO BE INSTALLED ABOVE GROUND, PIPE, FITTINGS AND VALVES SHALL BE THOROUGHLY CLEANED AND GIVEN ONE FIELD COAT (MINIMUM 1.5 MILS DRY THICKNESS) OF RUST INHIBITOR PRIMER, AND TWO FINISH COATS (MINIMUM 1.5 MILS DRY THICKNESS EACH).

   ALL DUCTILE IRON PIPE AND FITTINGS SHALL HAVE AN INTERIOR PROTECTIVE LINING OF CEMENT-MORTAR WITH A SEAL COAT OF ASPHALTIC MATERIAL IN ACCORDANCE WITH ANSI/AWWA A21.4/C104.

   THE PIPE SHALL BE POLYETHYLENE ENCASED (8 MIL) WHERE SHOWN ON THE PLANS, IN ACCORDANCE WITH ANSI/AWWA A21.51/C105.
3. POLYETHYLENE PIPE: FOUR (4)" THROUGH TWELVE (12)" SHALL BE AWWA STANDARD C906, PE3408 LATEST EDITION. THE POLYETHYLENE PIPE SHALL HAVE A MINIMUM WORKING PRESSURE RATING OF 160 PSI AND SHALL HAVE A STANDARD DIMENSION RATIO (SDR) OF 11. PIPE SHALL BE THE SAME ID AS DUCTILE IRON PIPE.

   POLYETHYLENE PIPE SHALL HAVE FUSION BONDED JOINTS.

   FITTINGS USED WITH POLYETHYLENE PIPE SHALL BE FUSION FITTINGS IN ACCORDANCE WITH AWWA STANDARD C906.
4. SERVICE PIPES: ALL SERVICE LINES SHALL BE ¾", 1", 1-1/2" OR 2", BLUE FOR POTABLE WATER AND PURPLE FOR REUSE WATER, PC200, SDR9, POLYETHYLENE TUBING CONFORMING TO SPECIFICATIONS IN AWWA C901, PE3608. 4" AND LARGER SERVICE PIPE SHALL BE C-900 PVC OR DIP. 3" SERVICE PIPE SHALL NOT BE PERMITTED.
5. VALVES SHALL BE RESILIENT WEDGE GATE VALVES.
6. VALVES SHALL BE LOCATED AT NOT MORE THAN 500 FOOT INTERVALS IN COMMERCIAL, INDUSTRIAL AND HIGH DENSITY RESIDENTIAL AREAS AND AT NOT MORE THAN 1000 FOOT INTERVALS IN ALL OTHER AREAS. APPROPRIATE VALVING SHALL ALSO BE PROVIDED ON ALL SIDES OF TEES AND CROSSES AND ON BOTH SIDES OF A DIRECTIONAL BORE OR JACK AND BORE.
7. ALL METERS SHALL BE INSTALLED BY TOHO AFTER ALL PAYMENT OF APPLICABLE FEES AND CHARGES. ALL METERS 2" AND LESS IN SIZE SHALL BE INSTALLED UNDERGROUND IN AN APPROVED METER BOX. METERS LARGER THAN 2" SHALL BE INSTALLED ABOVE GROUND. IN GENERAL, METERS 2" AND LARGER SHALL BE LOCATED IN A METER EASEMENT LOCATED ADJACENT TO THE PUBLIC RIGHT OF WAY AND OUTSIDE OF PAVED AREAS.

SEWER – TESTING:

PRIOR TO ANY TESTING TO BE WITNESSED, ALL PASSING SOIL DENSITY TESTS AND SLOPE SURVEYS SHALL BE SUBMITTED TO THE TOHO ENGINEER AND TO THE TOHO INSPECTOR.

1. ALL SANITARY MANHOLES SHALL BE INSPECTED BY TOHO PERSONNEL.
2. SANITARY SEWERS SHALL BE VIDEO INSPECTED AND WITNESSED BY TOHO PERSONNEL IN ACCORDANCE WITH THE TOHO STANDARDS, SPECIFICATIONS, AND DETAILS MANUAL, LATEST EDITION.
3. SANITARY SEWERS SHALL BE LOW PRESSURE AIR TESTED WITH NO ALLOWABLE LOSS AND WITNESSED BY TOHO PERSONNEL.
4. GRAVITY SANITARY SEWER MAINS SHALL REQUIRE A MANDREL TEST WHICH SHALL BE WITNESSED BY THE TOHO INSPECTOR IN ACCORDANCE WITH THE TOHO STANDARDS, SPECIFICATIONS, AND DETAILS MANUAL, LATEST EDITION.

GRAVITY SEWER – MATERIALS:

1. PVC PIPE: FOUR (4)" THROUGH FIFTEEN (15)" SHALL BE ASTM D3034, SDR 35. THE JOINTS SHALL BE INTEGRAL BELL ELASTOMERIC GASKET JOINTS MANUFACTURED IN ACCORDANCE WITH ASTM D3212 AND ASTM F477/APPLICABLE UNI-BELL PLASTIC PIPE ASSOCIATION STANDARD IS UNI B-4.

   PVC PIPE: EIGHTEEN (18)" THROUGH TWENTY-SEVEN (27)" SHALL BE ASTM F679, SDR 35. THE JOINTS SHALL BE INTEGRAL BELL ELASTOMERIC GASKET JOINTS MANUFACTURED IN ACCORDANCE WITH ASTM D3212 AND ASTM F477/ APPLICABLE UNI-BELL PLASTIC PIPE ASSOCIATION STANDARD IS UNI B-7.

   ALL PVC PIPE SHALL BEAR THE NSF-DW SEAL. THE MINIMUM STANDARD LENGTH OF PIPE SHALL BE THIRTEEN (13) FEET. PVC PIPE WITH LESS THAN 15 FT OF COVER SHALL BE SDR 35; 15 TO 20 FT SHALL BE SDR 26; AND 20 TO 30 FT SHALL BE SDR 18.
2. DIP PIPE: ANSI/AWWA A21.51/C151, CLASS THICKNESS DESIGNED PER ANSI/AWWA A21.50/C150, WITH FLANGE JOINTS. AN INTERIOR PROTECTIVE LINING OF "PROTECTO 401" EPOXY, OR EQUAL, WITH A MINIMUM DRY FILM THICKNESS 40 MILS. DIP SHALL ONLY BE USED ON ABOVE GROUND PIPE AT SANITARY LIFT STATIONS.
3. JOINT MATERIALS:
   - PVC SEWER PIPE JOINTS SHALL BE FLEXIBLE ELASTOMERIC SEALS PER ASTM D3212.
   - JOINTS BETWEEN PIPES OF DIFFERENT MATERIALS SHALL BE MADE WITH A RIGID, PVC, ADAPTOR COUPLING. FERNCO ADAPTERS SHALL ONLY BE PERMITTED WHEN TRANSITIONING BETWEEN CLAY PIPE AND PVC.

SEWER FORCE MAINS – TESTING:

1. FORCE MAIN PIPING SHALL BE INSTALLED AND PIGGED UNTIL CLEAN.
2. 2. FORCE MAIN SHALL BE PRESSURE TESTED IN ACCORDANCE WITH AWWA-C600 (DUCTILE IRON PIPE) AND AWWAC605/M23 (PVC PIPE) SPECIFICATIONS AT 100 PSI OR 1.5 TIMES THE OPERATING PRESSURE, WHICHEVER IS GREATER FOR A MINIMUM OF 2 HOURS AND WITNESSED BY TOHO PERSONNEL. NO LEAKAGE SHALL BE ALLOWED.

SEWER FORCE MAINS – MATERIALS:

1. PVC PIPE: FOUR (4)" THROUGH TWELVE (12)" SHALL BE AWWA STANDARD C900 AND A DIMENSION RATIO (DR) OF 25.

   PVC PIPE SHALL BE INTEGRAL BELL, PUSH-ON TYPE JOINTS.
2. DIP PIPE: FOUR (4)" THROUGH FIFTY-FOUR (54)" SHALL BE ANSI/AWWA A21.51/C151 WITH A MINIMUM OF PRESSURE CLASS 150 AND LINED WITH PROTECTO 401 OR EQUAL.

   ABOVE GROUND FITTINGS AND JOINTS SHALL BE FLANGED WITH T5 CADMIUM PLATED BOLTS, NUTS, AND WASHERS. FLANGED JOINTS SHALL CONFORM TO ANSI STANDARD B16.1-125 LB.

   DUCTILE IRON PIPE, FITTINGS, AND VALVES SHALL BE THOROUGHLY CLEANED AND GIVEN ONE FIELD COAT (MINIMUM 1.5 MILS DRY THICKNESS) OF RUST INHIBITOR PRIMER, AND TWO FINISH COATS (MINIMUM 1.5 MILS DRY THICKNESS EACH).

   ALL DUCTILE IRON PIPE AND FITTINGS SHALL HAVE AN INTERIOR PROTECTIVE LINING OF "PROTECTO 401" EPOXY OR EQUAL WITH A MINIMUM DRY FILM THICKNESS OF 40 MILS.
3. POLYETHYLENE (PE3408) PIPE: FOUR (4)" THROUGH TWELVE (12)" SHALL BE IN ACCORDANCE WITH AWWA STANDARD C906, LATEST EDITION. THE POLYETHYLENE PIPE SHALL HAVE A MINIMUM WORKING PRESSURE RATING OF 100 PSI AND SHALL HAVE A DIMENSION RATIO (DR) OF 17.

   POLYETHYLENE PIPE SHALL HAVE FUSION BONDED JOINTS.

   FITTINGS USED WITH POLYETHYLENE PIPE SHALL BE FUSION FITTINGS IN ACCORDANCE WITH AWWA STANDARD C906.
4. WASTEWATER FORCE MAINS SHALL BE EQUIPPED WITH AIR RELEASE VALVES LOCATED AT PIPING HIGH POINTS IMMEDIATELY UPSTREAM OF DIPS, OR OTHER ELEVATION DECLINES.
5. VALVES SHALL BE RESILIENT WEDGE GATE VALVES.
6. VALVES SHALL BE LOCATED AT NOT MORE THAN 2,000 FOOT INTERVALS IN ALL AREAS.

SEPARATION REQUIREMENTS:

PER F.D.E.P. REQUIREMENTS AND SUBJECT TO TOHO APPROVAL.

MISCELLANEOUS:

1. ALL TIE-INS TO EXISTING MANHOLES SHALL BE CORE DRILLED. CONNECT PIPE TO MANHOLE USING A FLEXIBLE CONNECTOR OR APPROVED A-LOK.
2. ALL MECHANICAL JOINTS SHALL BE RESTRAINED. THRUST BLOCKS ARE NOT PERMITTED ON TOHO MAINTAINED INFRASTRUCTURE.
3. MAINTAIN A MINIMUM 36" OF COVER MEASURED FROM THE BOTTOM OF THE SUB-GRADE TO THE TOP OF ALL WATER, REUSE, AND SANITARY SEWER PIPES. IF 36" OF COVER CANNOT BE MAINTAINED NOTIFY ENGINEER AND TOHO FOR EVALUATION.
4. GALVANIZED PIPE IS NOT ALLOWED AND IF ENCOUNTERED SHALL BE REPLACED WITH APPROVED MATERIALS.
5. 3M LOCATE TAPE SHALL BE INSTALLED 12" TO 18" OVER ALL PIPE BUT NO DEEPER THAN 4'. IF A MAIN IS MORE THAN 60" DEEP TO TOP OF PIPE THE 3M MARKER TAPE SHALL BE PLACED WITHIN THE TOP 3' OF FILL AND AN ADDITIONAL LAYER OF STANDARD METALLIC MARKING TAPE SHALL BE PLACE 12" ABOVE THE PIPE.
6. ALL PVC PIPE SHALL BE GREEN IN COLOR (FOR SEWER), BLUE IN COLOR (FOR WATER) AND PURPLE IN COLOR (FOR REUSE). DIP SHALL HAVE A CONTINUOUS 2" WIDE, PERMANENT BLUE/PURPLE STRIPE (OIL BASED ENAMEL) ON THE TOP OF THE PIPE.
7. DIRECTIONAL BORES SHALL USE 1 – 8 GAUGE STEEL CORE COPPER AND 1 – 8 GAUGE COPPER WIRE.
8. ONE COMPACTION TEST SHALL BE TAKEN FOR EACH 12" LAYER OF FILL FROM THE SPRINGLINE OF THE PIPE TO THE FINISH GRADE FOR EACH 300 FEET OF PIPE AND FOR EVERY 100 SQUARE FEET OF BACKFILL AROUND STRUCTURES.
9. ALL EXISTING WATER, REUSE AND SANITARY APPURTENANCES ON A PROJECT SITE WHICH MIGHT BE AFFECTED BY PROJECT WORK SHALL BE PROTECTED DURING CONSTRUCTION AND SHALL BE BROUGHT TO FINISHED GRADE PER THE TOHO STANDARDS, SPECIFICATIONS, AND DETAILS MANUAL, LATEST EDITION.
10. ALL TREE AND SHRUB ROOT BALLS SHALL BE PLACED WITH A MINIMUM OF 5' HORIZONTAL SEPARATION FROM TOHO MAINTAINED UTILITIES.
11. IF THE UNDERGROUND CONTRACTOR DE-MOBILIZES BETWEEN PHASES OF A PROJECT AND THE WATER DISTRIBUTION SYSTEM HAS BEEN CLEARED FOR USE BY FDEP, THE CONTRACTOR WILL BE REQUIRED TO INSTALL AUTOMATIC FLUSHING DEVICES ON ALL WATER MAIN DEAD-ENDS WHETHER INTENDED AS STUB-OUTS OR AS INCOMPLETE CONSTRUCTION. IF THE SITE HAS NOT BEEN CLEARED FOR USE BY FDEP, THE CONTRACTOR WILL BE REQUIRED TO PHYSICALLY DISCONNECT ALL UN-CLEARED MAINS FROM THE POINTS-OF-CONNECTION TO CLEARED MAINS.
12. WHEN REQUIRED BY ANOTHER REGULATORY AGENCY, MASONRY WALLS AROUND LIFT STATIONS SHALL REQUIRE BARBED WIRE AT THE TOP OF THE WALL. AT TOHO'S DISCRETION, ALTERNATIVE ANTI-CLIMB MEASURES MAY ALSO BE UTILIZED IN PLACE OF BARBED WIRE, HOWEVER, SIGNAGE WILL BE REQUIRED ON ALL EXTERIOR WALLS INDICATING THE USE OF ANTICLIMB MEASURES THAT MAY NOT BE VISIBLE.
13. ALL PERMANENT STRUCTURES INCLUDING, BUT NOT LIMITED TO BUILDING FOUNDATIONS, WALLS, AND LIGHT POLES SHALL BE PLACED WITH A MINIMUM 12' HORIZONTAL SEPARATION FROM ALL TOHO OWNED INFRASTRUCTURE.

811 Know what's below. Call before you dig.

REVISION	DATE
Revised per TWA comments dated Feb. 2025	Mar. 2025

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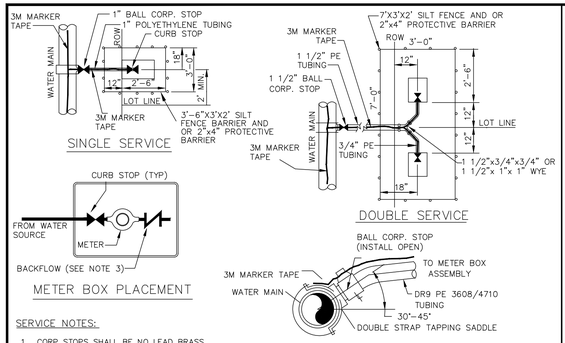


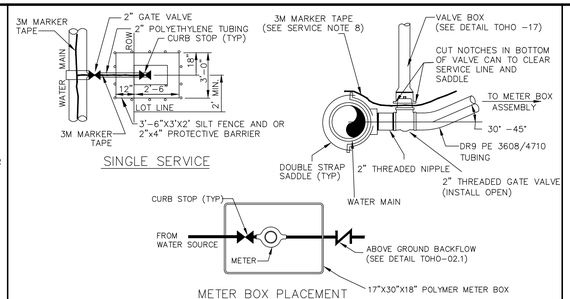
SERVICE NOTES:

1. CORP STOPS SHALL BE NO LEAD BRASS.
   1.1. INLET SHALL BE MATCHED TO TAPPING SADDLE.
   1.2. OUTLET SHALL BE FIP THREAD AND PACK JOINT ADAPTER W/ CLAMP SCREW RETAINER FOR INDIVIDUAL SERVICES NOT PRESSURE TESTED AS PART OF AN OVERALL LARGER SYSTEM.
   1.3. OUTLET SHALL BE PACK JOINT W/ CLAMP SCREW RETAINER FOR INDIVIDUAL SERVICES PRESSURE TESTED AS PART OF AN OVERALL LARGER SYSTEM.
2. CURB STOPS SHALL BE LOCKING TYPE, STRAIGHT BALL VALVE, NO LEAD BRASS.
   2.1. INLET SHALL BE PACK JOINT W/ CLAMP SCREW RETAINER
   2.2. OUTLET SHALL BE SWIVEL METER NUT CONNECTION TO MATCH METER SIZE.
3. SERVICE WYES SHALL BE NO LEAD BRASS PACK JOINT W/ CLAMP SCREW RETAINER INLET AND OUTLET.
4. SERVICE LINE SHALL BE CONTINUOUS. NO FITTINGS ARE PERMITTED ON THE POLY LINE BETWEEN THE CORP STOP AND THE CURB STOP OR BETWEEN THE CORP STOP AND THE WYE AND THE WYE AND THE CURB STOP.
5. NO CURB STOPS SHALL BE INSTALLED UNDER AN IMPERVIOUS SURFACE OR STRUCTURE.
6. SERVICE TAPS SHALL BE A MINIMUM OF 18" FROM JOINTS, FITTINGS, OR OTHER TAPS ON THE MAIN.
7. SERVICE TUBING SHALL BE POLYETHYLENE DR9, 200PSI. BLUE FOR POTABLE, PURPLE FOR REUSE.
8. PLACE APPROVED 3M MARKER TAPE TO THE CURB STOP(S) INSIDE THE BOX AND TIED INTO THE MARKER TAPE AT THE MAIN.
9. SERVICE LINES SHALL BE MARKED IN THE CURB OR SIDEWALK IMMEDIATELY ADJACENT TO PARKING SPACES WITH A 3" TALL "W" FOR WATER OR 3" TALL "R" FOR REUSE. MARKS SHALL BE PAINTED BLUE FOR WATER AND PURPLE FOR REUSE.
10. THIS DETAIL IS INTENDED FOR 1" AND 1" RESIDENTIAL METERS ONLY. FOR 1.5" OR 2" METERS REFER TO TOHO-02.
11. THIS DETAIL IS INTENDED FOR SINGLE OR DOUBLE SERVICE RESIDENTIAL CONNECTIONS ONLY. FOR GROUPS OF 3 -8 METERS REFER TO TOHO-03.0, TOHO-03.1, AND TOHO-03.2

METER AND METER BOX PLACEMENT NOTES

1. METERS 1" TO 1" ARE PAID FOR BY THE DEVELOPER AND INSTALLED BY TOHO.
2. METER BOX(ES), SERVICE LINE(S), AND ALL ASSOCIATED APPURTENANCES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR DEVELOPER.
3. TOHO PROVIDES APPROVED IN-GROUND BACKFLOW DEVICES ON ALL 1" AND 1" RESIDENTIAL METERS.
4. CURB STOP SHALL BE INSTALLED WITH THE OPERATING NUT FACING UP.
5. NO PLANTINGS, STRUCTURES, OR OTHER UTILITIES, INCLUDING BUT NOT LIMITED TO TELECOM PEDESTALS, ELECTRICAL TRANSFORMERS OR POLES, ETC. SHALL BE INSTALLED WITHIN 36" OF ANY SIDE OF THE METER BOX.
6. BUILDER SHALL MAKE FINAL HORIZONTAL AND VERTICAL ADJUSTMENTS TO METER ASSEMBLY AND BOX:
   6.1. METER SHALL BE APPROXIMATELY 7" BELOW FINISHED GRADE AND CENTERED IN THE BOX.
   6.2. SINGLE LOT SERVICES SHALL HAVE BOX(ES) PERPENDICULAR TO THE CURB OR SIDEWALK.
   6.3. DOUBLE LOT SERVICES SHALL HAVE BOX(ES) PARALLEL TO THE CURB OR SIDEWALK.
   6.4. TOP OF METER BOX(ES) SHALL BE FLUSH WITH FINISH GRADE.
7. METER BOX LID SHALL BE SOLID PLASTIC WITH NO METAL ACCESS DOOR, BLACK FOR WATER, PURPLE FOR REUSE.

EFFECTIVE DATE:	04/01/2025	TYPICAL POTABLE WATER SERVICE
BOARD APPROVED DATE:	01/28/2025	DRAWING NUMBER 01.0
PREVIOUS VERSION:	2022	
DRAWN BY:	MP	
REVISED BY:	DT	



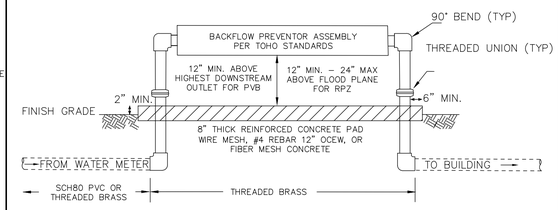
SERVICE NOTES:

1. GATE VALVES SHALL BE RESILIENT WEDGE, CAST IRON, EPOXY COATED, THREADED INLET AND OUTLET WITH 2" OPERATING NUT.
2. CURB STOPS SHALL BE LOCKING TYPE, STRAIGHT BALL VALVE, NO LEAD BRASS.
   2.1. INLET SHALL BE PACK JOINT W/ CLAMP SCREW RETAINER.
   2.2. 1.5" AND 2" OUTLET SHALL BE 2 BOLT FLANGE METER CONNECTION.
   2.3. 2" AND 1" OUTLET SHALL BE SWIVEL METER NUT CONNECTION MATCHING METER SIZE.
3. SERVICE LINE SHALL BE CONTINUOUS, NO FITTINGS ARE PERMITTED ON THE POLY LINE BETWEEN THE GATE VALVE AND THE CURB STOP.
4. NO CURB STOPS SHALL BE INSTALLED UNDER AN IMPERVIOUS SURFACE OR STRUCTURE.
5. SERVICE TAPS SHALL BE A MINIMUM OF 18" FROM JOINTS, FITTINGS, OR OTHER TAPS ON THE MAIN.
6. SERVICE TUBING SHALL BE POLYETHYLENE DR9, 200PSI. BLUE FOR POTABLE WATER, PURPLE FOR REUSE WATER.
7. PLACE APPROVED 3M MARKER TAPE TO THE CURB STOP(S) INSIDE THE BOX TIED TO THE MARKER TAPE AT THE MAIN.
8. SERVICE LINES SHALL BE MARKED IN THE CURB OR SIDEWALK IMMEDIATELY ADJACENT TO PARKING SPACES WITH A 3" TALL "W" FOR WATER OR A 3" TALL "R" FOR REUSE. MARKS SHALL BE PAINTED BLUE FOR WATER PURPLE FOR REUSE.
9. THIS DETAIL IS INTENDED FOR SINGLE 2" WATER SERVICES ONLY. NO MORE THAN 1 METER, REGARDLESS OF SIZE, SHALL BE PLACED ON COMMERCIAL SERVICES COVERED BY THIS DETAIL.

METER AND METER BOX PLACEMENT NOTES:

1. METERS 2" TO 2" ARE PAID FOR BY THE DEVELOPER AND INSTALLED BY TOHO.
2. METER BOX(ES), SERVICE LINE(S), AND ALL ASSOCIATED APPURTENANCES ARE THE RESPONSIBILITY OF THE CONTRACTOR AND/OR DEVELOPER.
3. APPROVED BACKFLOW DEVICES ARE REQUIRED ON ALL COMMERCIAL SERVICES AND ARE THE RESPONSIBILITY OF THE CONTRACTOR ANS/OR DEVELOPER:
   3.1. RPZ BACKFLOW DEVICES SHALL BE INSTALLED A MINIMUM OF 12' ABOVE THE 100 YEAR FLOOD LEVEL.
   3.2. PVB BACKFLOW DEVICES SHALL BE INSTALLED A MINIMUM OF 12" ABOVE THE HIGHEST OUTLET.
   3.3. SEE DETAIL TOHO-02.1 TYPICAL BACKFLOW ASSEMBLY FOR ADDITIONAL REQUIREMENTS.
4. CURB STOP SHALL BE INSTALLED WITH THE OPERATING NUT FACING UP.
5. NO PLANTINGS, STRUCTURES, OR OTHER UTILITIES, INCLUDING BUT NOT LIMITED TO TELECOM PEDESTALS, ELECTRICAL TRANSFORMERS OR POLES, ETC. SHALL BE INSTALLED WITHIN 36" OF ANY SIDE OF THE METER BOX.
6. BUILDER SHALL MAKE FINAL HORIZONTAL AND VERTICAL ADJUSTMENTS TO METER ASSEMBLY AND BOX:
   6.1. METER SHALL BE APPROXIMATELY 7" BELOW FINISHED GRADE AND CENTERED IN THE BOX.
   6.2. METER BOXES SHALL BE PERPENDICULAR TO THE CURB OR SIDEWALK.
   6.3. TOP OF METER BOX SHALL BE FLUSH WITH FINISH GRADE.
7. METER BOX LID SHALL BE SOLID PLASTIC WITH NO METAL ACCESS DOOR, BLACK FOR WATER, PURPLE FOR REUSE.

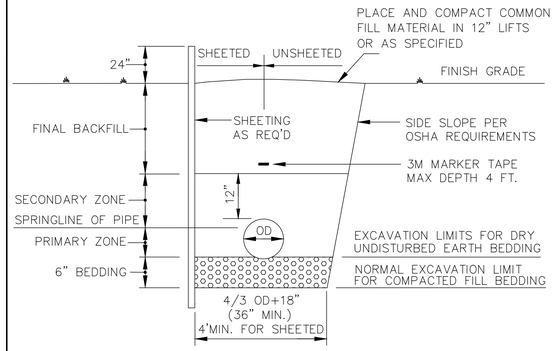
EFFECTIVE DATE:	04/01/2025	TYPICAL COMMERCIAL WATER SERVICE
BOARD APPROVED DATE:	01/28/2025	DRAWING NUMBER 02.0
PREVIOUS VERSION:	2022	
DRAWN BY:	MP	
REVISED BY:	DT	



NOTES:

1. THIS DETAIL IS APPLICABLE FOR ALL SERVICES 2" AND SMALLER REQUIRING AN ABOVE GROUND BACKFLOW DEVICE.
2. BACKFLOW PREVENTOR TYPE SHALL BE PER TOHO STANDARDS.
3. BACKFLOW SIZE SHALL NOT BE MORE THAN ONE NOMINAL SIZE SMALLER OR LARGER THAN THE WATER METER.
4. BACKFLOW SHALL NOT BE PLACED MORE THAN 18" FROM THE METER.
5. PRESSURE VACUUM BREAKER BACKFLOWS SHALL BE INSTALLED 12" ABOVE THE HIGHEST OUTLET. ALL OTHER TYPES OF BACKFLOW PREVENTERS SHALL BE INSTALLED A MINIMUM OF 12" TO A MAXIMUM OF 24" ABOVE THE 100 YEAR FLOOD PLAIN.
6. NO PLANTINGS, STRUCTURES, OR OTHER UTILITIES, INCLUDING BUT NOT LIMITED TO TELECOM PEDESTALS, ELECTRICAL TRANSFORMERS OR POLES, ETC. SHALL BE INSTALLED WITHIN 36" OF ANY SIDE OF THE BACKFLOW ASSEMBLY OR PAD.
7. ALL SERVICE PIPING AND FITTINGS BETWEEN THE METER AND THE BELOW GRADE 90 DOWNSTREAM OF THE BACKFLOW SHALL BE SCH80 PVC OR THREADED NO LEAD BRASS.
8. ALL SERVICE PIPING AND FITTINGS BETWEEN THE TWO BELOW GRADE 90s SHALL BE THREADED NO LEAD BRASS.
9. 8" THICK CONCRETE PAD SHALL EXTEND A MINIMUM OF 6" BEYOND THE FURTHEST HORIZONTAL POINT OF THE ASSEMBLY ON ALL SIDES.
10. TOP OF CONCRETE PAD SHALL BE A MINIMUM OF 2" ABOVE FINISH GRADE.
11. STANDPIPES SHALL BE ISOLATED FROM THE CONCRETE PAD VIA EXPANSION JOINT OR OTHER SUITABLE MATERIAL.
12. PAD SHALL BE FIBER REINFORCED CONCRETE OR CONCRETE WITH WIRE MESH OR #4 REBAR 12" OCEW.

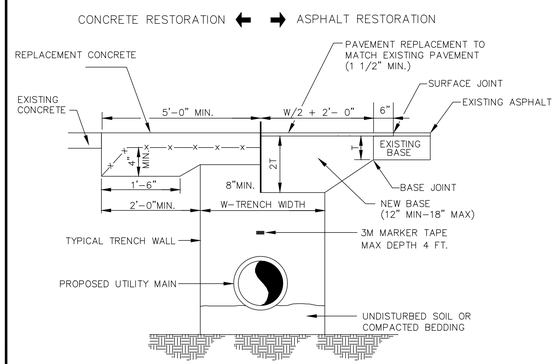
EFFECTIVE DATE:	04/01/2025	TYPICAL BACKFLOW ASSEMBLY
BOARD APPROVED DATE:	01/28/2025	DRAWING NUMBER 02.1
PREVIOUS VERSION:	NA	
DRAWN BY:	DT	
REVISED BY:	DT	



NOTES:

1. PRIMARY & SECONDARY ZONES SHALL BE INDIVIDUALLY COMPACTED LAYERS OF CLEAN FILL.
2. COMPACTION OF BACKFILL BENEATH PAVEMENT SHALL BE 98% OF AASHTO T-180, ALL OTHER AREAS SHALL BE 95% OF AASHTO T-180 UNLESS OTHERWISE REQUIRED BY ANOTHER AUTHORITY HAVING JURISDICTION.
3. PLACE APPROVED 3M MARKER TAPE OR EQUAL DIRECTLY ABOVE THE CENTERLINE OF THE PIPE.
   3.1. TAPE SHALL BE 12"-18" ABOVE THE PIPE.
   3.2. TAPE SHALL NOT EXCEED 4' DEPTH.
   3.3. IF TOP OF PIPE IS GREATER THAN 5' DEEP, AN ADDITIONAL LAYER OF WARNING TAPE SHALL BE PROVIDED 12"-18" OVER THE PIPE AND THE MARKER TAPE SHALL BE PLACED AT A DEPTH NOT TO EXCEED 4'.
4. SLOPES, BENCHING, AND/OR SHORING SHALL BE PER OSHA REQUIREMENTS.

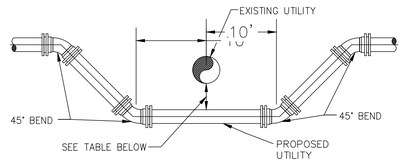
EFFECTIVE DATE:	04/01/2025	TYPICAL PIPE TRENCH
BOARD APPROVED DATE:	01/28/2025	DRAWING NUMBER 14
PREVIOUS VERSION:	2022	
DRAWN BY:	MP	
REVISED BY:	DT	



NOTES:

1. SURFACE AND BASE CUTS SHALL BE SAW CUT.
2. LONGITUDINAL OR DIAGONAL CUTS REQUIRE OVERLAY/RESURFACING OF THE COMPLETE WIDTH OF THE ROAD.
3. CUTS AT INTERSECTIONS REQUIRE COMPLETE OVERLAY/RESURFACING TO THE END OF ALL RETURN TURNOUTS AND/OR 10' BEYOND THE CUT(S), WHICHEVER IS GREATER.
4. CUTS THRU TURNOUTS AND CUL-DE-SACS REQUIRE COMPLETE OVERLAY/RESURFACING
5. COMPACTION OF BACKFILL SHALL BE 98% OF AASHTO T-180.
6. PLACE APPROVED 3M MARKER TAPE OR EQUAL DIRECTLY ABOVE THE CENTERLINE OF THE PIPE.
   6.1. TAPE SHALL BE 12"-18" ABOVE THE PIPE.
   6.2. TAPE SHALL NOT EXCEED 4' DEPTH.
   6.3. IF TOP OF PIPE IS GREATER THAN 5' DEEP, AN ADDITIONAL LAYER OF WARNING TAPE SHALL BE PROVIDED 12"-18" OVER THE PIPE AND THE MARKER TAPE SHALL BE PLACED AT A DEPTH NOT TO EXCEED 4'.
7. SLOPES, BENCHING, AND/OR SHORTING SHALL BE PER OSHA REQUIREMENTS.
8. THIS DETAIL APPLIES TO OPEN CUTS NOT LOCATED WITHIN PUBLIC RIGHTS-OF-WAY OR OTHERWISE NOT DICTATED BY ANOTHER AUTHORITY HAVING JURISDICTION.

EFFECTIVE DATE:	04/01/2025	OPEN CUT
BOARD APPROVED DATE:	01/28/2025	DRAWING NUMBER 15
PREVIOUS VERSION:	2022	
DRAWN BY:	MP	
REVISED BY:	DT	



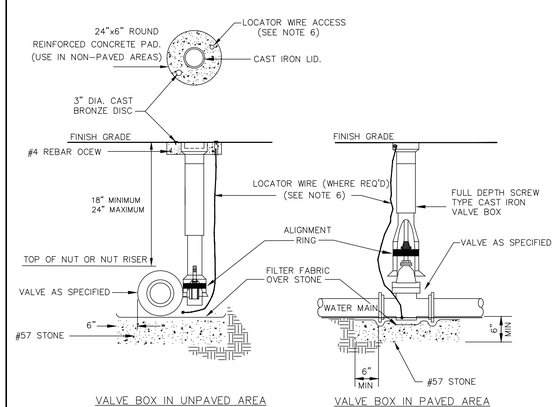
UTILITY CROSSING DETAIL

PROPOSED UTILITY	MINIMUM HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS							
	POTABLE WATER		RECLAIMED WATER		SANITARY SEWER (GRAVITY & F.M.)		STORM DRAIN	
	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.
POTABLE WATER	3'	6"	3'	12"	6' ALLOWED 10' PREFERRED	12"	3'	12"
RECLAIMED WATER	3'	12"	3'	6"	3'	12"	3'	6"
SANITARY SEWER	6' ALLOWED 10' PREFERRED	12"	3'	12"	3'	6"	3'	6"

NOTES:

1. PIPE RESTRAINTS SHALL BE PER THE THRUST RESTRAINT DETAIL TOHO-19 AND RESTRAINED JOINT TABLE TOHO-20.
2. THIS TABLE REPRESENTS THE MINIMUM SEPARATION REQUIREMENTS AS DESCRIBED IN F.D.E.P. RULES OF THE FLORIDA ADMINISTRATION CODE (F.A.C.) AND TOHO'S SEPARATION REQUIREMENTS TO FACILITATE FUTURE MAINTENANCE. THESE REQUIREMENTS SHALL APPLY BETWEEN PROPOSED UTILITY LINES AND EXISTING OR PROPOSED UTILITY LINES. ADDITIONAL SEPARATION BASED ON PIPE SIZE(S) AND LOCATION MAY BE REQUIRED AT TOHO'S DISCRETION.
3. RECLAIMED WATER IS DEFINED AS UNRESTRICTED PUBLIC ACCESS REUSE WATER AS DEFINED BY F.A.C. 17-610. OTHER TYPES OF RECLAIMED WATER ARE CONSIDERED RAW SEWAGE AND SEPARATIONS LISTED FOR SANITARY SEWER SHALL APPLY.
4. ALL SEPARATION DISTANCES ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE UNLESS OTHERWISE SPECIFIED:
   4.1. AT TOHO'S DISCRETION, THE HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY SANITARY SEWER MAINS MAY BE REDUCED TO 3' WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6" ABOVE THE TOP OF THE SEWER MAIN.
   4.2. AT TOHO'S DISCRETION THE VERTICAL SEPARATION FOR WATER MAINS AND STORM SEWER MAINS OR GRAVITY SEWER MAINS MAY BE REDUCED TO 6" IF THE WATER MAIN IS LOCATED ABOVE THE STORM SEWER OR GRAVITY SEWER MAIN(S).
5. WHERE POTABLE WATER AND SANITARY SEWER MAINS OR RECLAIM WATER MAINS CROSS, THE WATER MAIN SHALL BE CENTERED ON THE CROSSING. ALL WATER MAIN JOINTS SHALL BE AT LEAST 6' AWAY FROM ALL SEWER OR RECLAIM JOINTS AND AT LEAST 3' AWAY FROM ALL STORM SEWER JOINTS.
6. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SANITARY SEWER OR STORM SEWER MANHOLE, STRUCTURE, OR PIPE.
7. IF 36" MINIMUM DEPTH OF COVER IS NOT MAINTAINED, SPECIAL PROTECTION OR PIPE MATERIAL MAY BE REQUIRED AT THE DIRECTION OF TOHO.

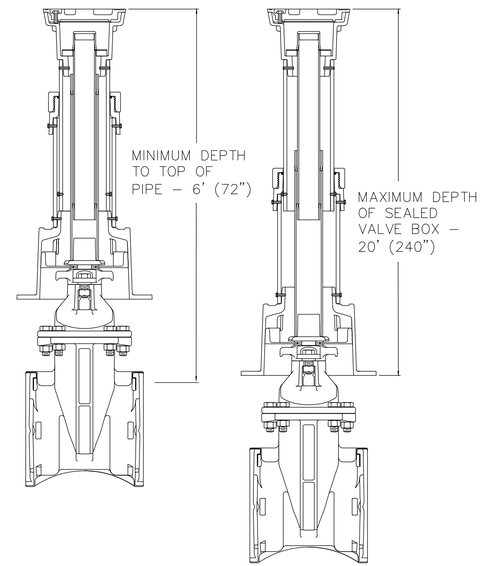
EFFECTIVE DATE:	04/01/2025	PIPE CLEARANCES AND CROSSINGS
BOARD APPROVED DATE:	01/28/2025	DRAWING NUMBER 16
PREVIOUS VERSION:	2022	
DRAWN BY:	CC	
REVISED BY:	DT	



NOTES:

1. #57 STONE BEDDING SHALL BE REQUIRED A MINIMUM DEPTH OF 6" BELOW ALL VALVES. PLACE FILTER FABRIC OVER STONE PRIOR TO SETTING VALVE.
2. NO PLANTINGS, STRUCTURES, OR OTHER UTILITIES, INCLUDING BUT NOT LIMITED TO TELECOM PEDESTALS, ELECTRICAL TRANSFORMERS OR POLES, ETC. SHALL BE INSTALLED WITHIN 36" OF ANY SIDE OF ANY VALVE.
3. OPERATING NUT SHALL BE BOLTED, SHEER PINS ARE NOT PERMITTED.
4. WHERE THE VALVE OPERATING NUT MUST BE SET DEEPER THAN 24", A BOLT ON VALVE NUT RISER SHALL BE REQUIRED.
5. TWO PIECE FULL DEPTH CAST IRON SCREW TYPE ADJUSTABLE VALVE BOXES ARE REQUIRED. PVC, DIP, OR CI VALVE BOX EXTENSIONS ARE NOT PERMITTED.
6. LOCATOR WIRE ACCESS FOR DIRECTIONAL BORE OR JACK AND BORE APPLICATIONS:
   6.1. IN UNPAVED AREAS USE 2" SCH80 PVC, FEMALE ADAPTER COUPLING AND 2" BRASS PLUG W/ RECESSED NUT SET IN THE VALVE PAD.
   6.2. IN PAVED AREAS TERMINATE THE LOCATE WIRE INSIDE THE TOP PORTION OF THE VALVE BOX.
   6.3. PROVIDE A MINIMUM OF 12" OF EXTRA WIRE ABOVE FINISHED GRADE.
7. PRIVATELY MAINTAINED SYSTEMS SHALL HAVE 'PRIVATE' STAMPED ON THE BRONZE DISC.
8. DEDICATED FIRE LINES SHALL HAVE 'FIRE' STAMPED ON THE BRONZE DISC AND THE VALVE COVER SHALL BE PAINTED RED.

EFFECTIVE DATE:	04/01/2025	VALVE AND BOX
BOARD APPROVED DATE:	01/28/2025	DRAWING NUMBER 17.0
PREVIOUS VERSION:	2022	
DRAWN BY:	MP	
REVISED BY:	DT	



EFFECTIVE DATE:	04/01/2025	ADJUSTABLE SEALED VALVE BOX
BOARD APPROVED DATE:	01/28/2025	DRAWING NUMBER 17.1
PREVIOUS VERSION:	NA	
DRAWN BY:	APC	
REVISED BY:	DT	

REVISION	DATE
Revised per TWA comments dated Feb. 2025	Mar. 2025

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

TOHO WATER AUTHORITY WATER DETAILS

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

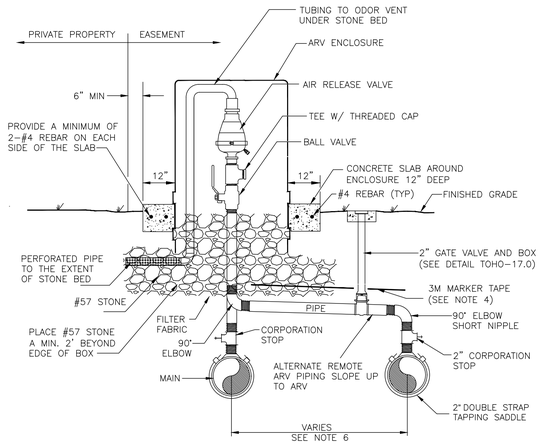
DATE
June 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
NONE

SHEET NUMBER
29

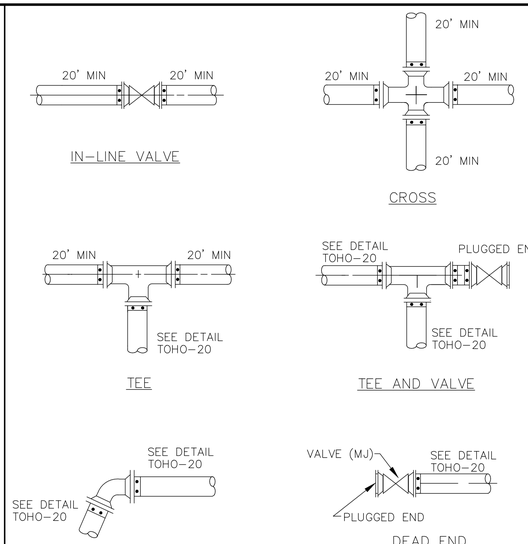


NOTES:

1. FOR SANITARY FORCE MAIN ARVs ALL SADDLES, STOPS, FITTINGS, PIPING, ETC. SHALL BE STAINLESS STEEL SIZED TO THE ARV INLET.
2. WHERE DESIGNATED APPROPRIATE BY TOHO, WATER OR REUSE MAIN ARVs MAY BE REQUIRED. WATER AND REUSE ARV SADDLES, STOPS, FITTINGS, AND PIPING MATERIAL SHALL BE AT THE DIRECTION OF TOHO.
3. PLACE #57 STONE BEDDING UNDER THE ENCLOSURE AND PAD. PLACE FILTER FABRIC UNDER, AROUND, AND OVER THE #57 STONE PRIOR TO PLACING THE ENCLOSURE AND PAD.
4. PLACE APPROVED 3M MARKER TAPE ABOVE THE OFFSET PIPE, NOT TO EXCEED A DEPTH OF 4' AND TIED INTO THE MARKER TAPE ON THE MAIN.
5. ENCLOSURE VENTS MUST BE CAPABLE OF ALLOWING THE SAME AIRFLOW AS THE ARV AS MEASURED IN CFM.
6. OFFSET REQUIREMENT AND DISTANCE SHALL BE DETERMINED BY TOHO BASED ON FIELD CONDITIONS AND SITE CONSTRAINTS.
7. THIS DETAIL APPLIES TO 2" ARVs FOR 12" OR SMALLER MAINS. MAINS LARGER THAN 12" SHALL HAVE ARVs INSTALLED PER TOHO-18.1.

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/22/2025
PREVIOUS VERSION:	2022
DRAWN BY:	MP
REVISED BY:	DT

STANDARD AIR RELEASE VALVE — DRAWING NUMBER 18.0

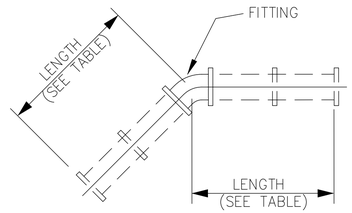


NOTES:

1. MECHANICAL PIPE RESTRAINT SYSTEMS SHALL BE REQUIRED. THRUST BLOCKS WILL ONLY BE PERMITTED ON A CASE-BY-CASE BASIS AS DETERMINED BY TOHO.
2. ALL MECHANICAL JOINT FITTINGS (TEES, BENDS, CROSSES, ELBOWS, ETC.) AND VALVES SHALL BE RESTRAINED.
3. RESTRAIN THRU VALVES.

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/22/2025
PREVIOUS VERSION:	2022
DRAWN BY:	MP
REVISED BY:	DT

THRUST RESTRAINT — DRAWING NUMBER 19



MINIMUM LENGTH (IN FEET) OF RESTRAINED PIPE REQUIRED

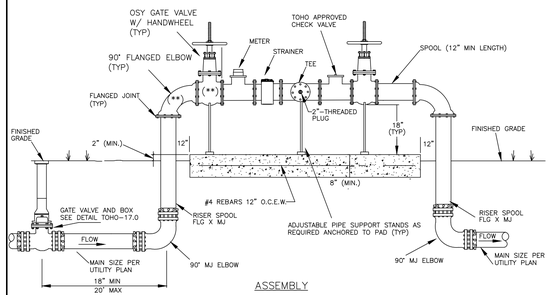
PIPE SIZE (DIAMETER IN INCHES)	BENDS										OTHER FITTINGS					
	90°		45°		22 1/2°		11 1/4°		VERTICAL BENDS		DEAD END		CROSS OR VALVE		TEE BRANCH	
	100psi	150psi	100psi	150psi	100psi	150psi	100psi	150psi	100psi	150psi	100psi	150psi	100psi	150psi	100psi	150psi
4"	20'	20'	20'	20'	20'	20'	20'	20'	20'	20'	40'	40'	20'	20'	40'	40'
6"	20'	40'	20'	20'	20'	20'	20'	20'	20'	40'	40'	60'	20'	20'	40'	40'
8"	20'	40'	20'	20'	20'	20'	20'	20'	40'	40'	40'	80'	20'	20'	40'	40'
12"	40'	40'	20'	20'	20'	20'	20'	20'	40'	60'	60'	100'	20'	20'	40'	40'
14"	40'	60'	20'	20'	20'	20'	20'	20'	40'	60'	80'	120'	20'	20'	40'	40'
16"	40'	60'	20'	20'	20'	20'	20'	20'	40'	60'	80'	120'	20'	20'	40'	60'
20"	40'	60'	20'	40'	20'	20'	20'	20'	60'	80'	100'	160'	20'	20'	40'	80'
24"	60'	80'	20'	40'	20'	20'	20'	20'	60'	80'	120'	180'	20'	20'	40'	100'
30"	60'	80'	40'	40'	20'	20'	20'	20'	80'	100'	140'	200'	20'	20'	60'	140'

NOTES:

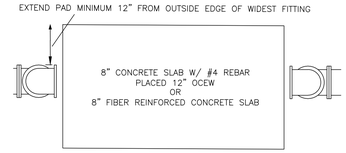
1. THE ABOVE THRUST RESTRAINT TABLE SHALL BE USED FOR THE FOLLOWING TRENCH CONDITIONS:
   1.a MINIMUM 50% SOIL RETAINED ON A NUMBER 200 SIEVE
   1.b MINIMUM 98% COMPACTION, AASHTO T-180 UNDER PAVEMENT
   1.c MINIMUM 95% COMPACTION, AASHTO T-180 ALL OTHER AREAS
   1.d MINIMUM 3' OF COVER
2. THE ABOVE TABLE SPECIFIES THE LENGTH OF RESTRAINED PIPE SECTIONS REQUIRED, IN EACH DIRECTION OF PIPE ON EXTENDED CENTERLINE OF FITTING.
3. WHERE CONDITIONS VARY FROM THE ABOVE TABLE, A FLORIDA REGISTERED PROFESSIONAL ENGINEER MUST DETERMINE THE REQUIRED LENGTH OF OF RESTRAINAED PIPE.
4. ALL FITTINGS, VALVES AND RESTRAINED PIPE SHALL BE RESTRAINED WITH TOHO APPROVED MATERIALS.

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/22/2025
PREVIOUS VERSION:	2022
DRAWN BY:	CC
REVISED BY:	DT

RESTRAINED JOINT TABLE — DRAWING NUMBER 20



ASSEMBLY



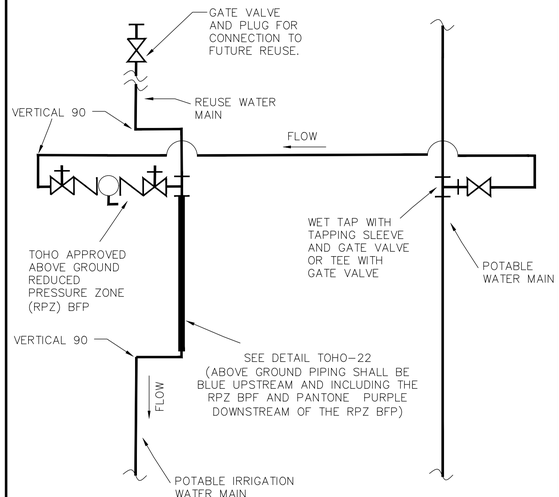
TOP VIEW

NOTES:

1. ALL FITTINGS INCLUDING BUT NOT LIMITED TO THE STRAINER, METER, CHECK VALVE, TEE, ETC. SHALL BE THE RESPONSIBILITY OF THE DEVELOPER AND/OR CONTRACTOR TO PROVIDE AND INSTALL.
2. GALVANIZED PIPE, SCH PVC PIPE, THREADED, OR PUSH JOINT FITTINGS ARE NOT ALLOWED.
3. PROTECTIVE BOLLARD(S) MAY BE REQUIRED AT THE DISCRETION OF TOHO.
4. MAINTAIN A MINIMUM 3' CLEARANCE AROUND ALL SIDES OF THE ASSEMBLY FREE OF PLANTINGS, STRUCTURES, OTHER UTILITIES, ETC.
5. IF CHEMICAL INJECTION IS USED, THE CHECK VALVE SHALL BE REPLACED WITH A REDUCED PRESSURE ZONE (RPZ) BACKFLOW DEVICE AT THE OWNER'S EXPENSE.
6. ALL ABOVE GROUND PIPING SHALL BE PAINTED PANTONE PURPLE.
7. WHERE REUSE IS UNAVAILABLE AND THE SYSTEM IS JUMPED TO POTABLE WATER:
   7.1. SEE TOHO-22.1 POTABLE REUSE JUMPER LAYOUT DETAIL FOR ADDITIONAL INFORMATION.
   7.2. PROVIDE A TEE BETWEEN THE ELBOW AND GV MARKED WITH (**) ABOVE. THE BRANCH OF THE TEE SHALL BE PARALLEL TO THE GROUND AND SHALL FACE AWAY FROM THE PAVEMENT OR TRAVELWAY.
   7.3. PROVIDE A REDUCED PRESSURE ZONE (RPZ) BACKFLOW PREVENTER ON THE BRANCH OF THE TEE.
   7.4. PAINT THE ABOVE GROUND PIPING UP TO AND INCLUDING THE RPZ BACKFLOW BLUE AND ALL ABOVE GROUND PIPING DOWNSTREAM OF THE RPZ BACKFLOW PANTONE PURPLE.

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/22/2025
PREVIOUS VERSION:	2022
DRAWN BY:	MP
REVISED BY:	DT

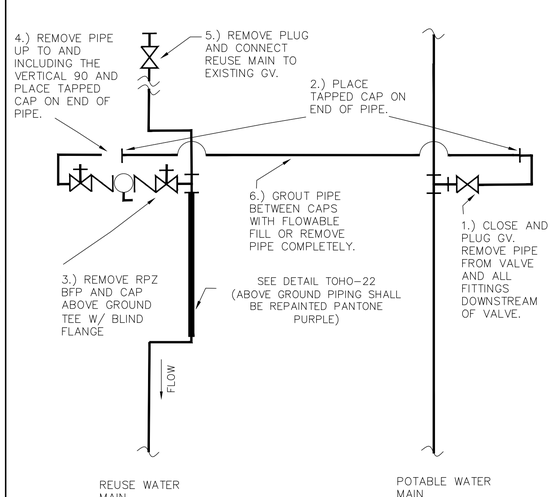
LARGE REUSE METER ASSEMBLY — DRAWING NUMBER 22.0



SEE DETAIL TOHO-22.2 FOR JUMPER CONFIGURATION CONVERSION WHEN REUSE BECOMES AVAILABLE FOR CONNECTION.

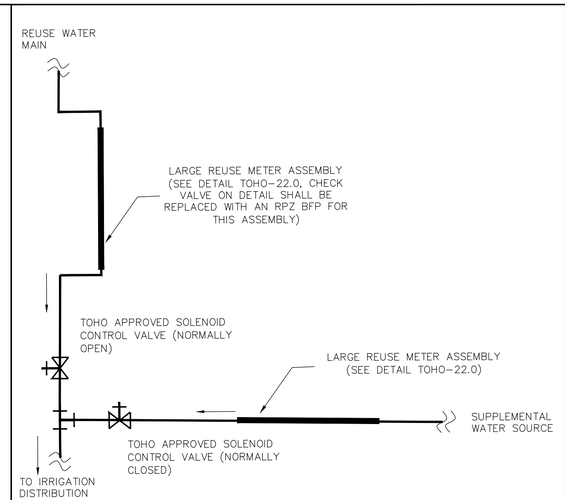
EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/22/2025
PREVIOUS VERSION:	NA
DRAWN BY:	DT
REVISED BY:	DT

POTABLE TO REUSE JUMPER LAYOUT — DRAWING NUMBER 22.1



EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/22/2025
PREVIOUS VERSION:	NA
DRAWN BY:	DT
REVISED BY:	DT

POTABLE TO REUSE JUMPER REMOVAL — DRAWING NUMBER 22.2

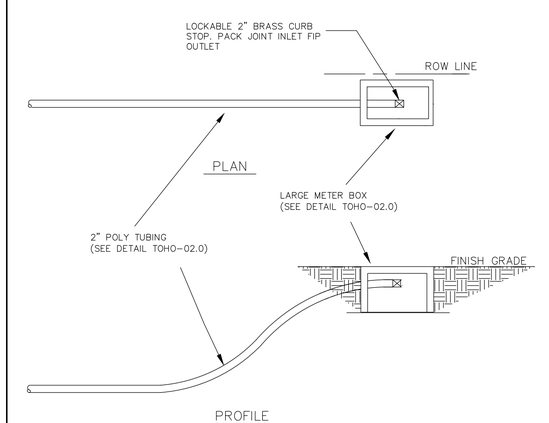


NOTES:

1. SOLENOID CONTROL VALVES SHALL BE ELECTRONICALLY ACTUATED. PRESSURE TRANSMITTERS LOCATED UPSTREAM OF THE METER ASSEMBLIES SHALL BE PROVIDED BY THE OWNER/DEVELOPER AND INSTALLED BY THE CONTRACTOR.
2. ELECTRONIC ACTUATION WILL REQUIRE PERMANENT SHORE POWER TO BE PROVIDED BY THE OWNER/DEVELOPER AND INSTALLED BY THE CONTRACTOR.
3. SOLENOID CONTROL VALVES TO BE INSTALLED IN-GROUND IN TOHO APPROVED VAULTS.
4. WHERE REQUIRED, ELECTRONIC CONTROL OR INTERFACE DEVICES SHALL BE INSTALLED NEXT TO THE METER REGISTERING TOHO REUSE WATER FLOW.
5. VALVES, ELECTRONICS, AND SITE SPECIFIC PLAN SHALL BE PROVIDED BY THE OWNER/DEVELOPER AND APPROVED BY TOHO PRIOR TO CONSTRUCTION.

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/22/2025
PREVIOUS VERSION:	NA
DRAWN BY:	DT
REVISED BY:	DT

REUSE WITH SUPPLEMENTAL IRRIGATION LAYOUT — DRAWING NUMBER 22.3



NOTES:

1. BLOWOFF SHALL TERMINATE WITH A 2" LOCKABLE CURB STOP IN A PLASTIC DOUBLE METER BOX.
2. BOX SHALL BE SET PER DETAILS TOHO-01, TOHO-01.1, & TOHO-0.2.
3. MAIN SHALL BE PIGGED PRIOR TO INSTALLING BLOWOFF.
4. ALL SADDLES, STOPS, & FITTINGS SHALL BE NO LEAD BRASS PACK JOINT W/ CLAMP SCREW RETAINER. NO GALVANIZED PIPE OR FITTINGS ALLOWED.

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/22/2025
PREVIOUS VERSION:	2022
DRAWN BY:	MP
REVISED BY:	DT

BLOW-OFF — DRAWING NUMBER 25

REVISION	DATE
Revised per TVVA comments dated Feb. 2025	Mar. 2025

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Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

TOHO WATER AUTHORITY WATER DETAILS

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

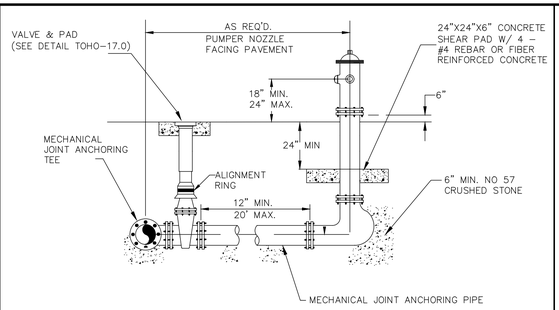
DATE
June 2025

DRAWN BY
TLK/JMK

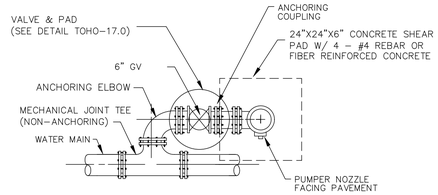
PROJECT NUMBER
23-12

SCALE
NONE

SHEET NUMBER
30



TYPICAL CONDITION

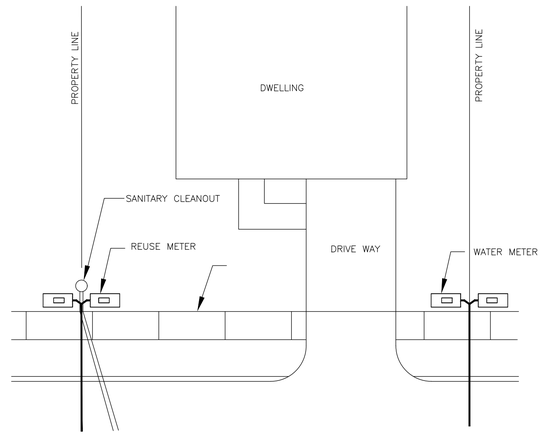


LIMITED RIGHT-OF-WAY CONDITION

NOTES:

1. HYDRANT SHALL BE SUPPLIED WITHOUT A WEEP HOLE OR WITH A PERMANENTLY PLUGGED WEEP HOLE.
2. CLEARANCE BETWEEN BOTTOM OF BOLTS AND FINISH GRADE SHALL BE 6" MINIMUM.
3. CLEARANCE BETWEEN CENTER OF PUMPER NOZZLE AND FINISH GRADE SHALL BE 18" MINIMUM AND 24" MAXIMUM.
4. PLANTING CLEAR AREA(S) SHALL BE PER APPLICABLE FIRE CODE(S).
5. IF HYDRANT IS LOCATED MORE THAN 20 LINEAR FEET FROM THE MAIN OR ON THE OPPOSITE SIDE OF A TRAVELWAY FROM THE MAIN, AN ADDITIONAL GATE VALVE SHALL BE REQUIRED IMMEDIATELY UPSTREAM OF THE HYDRANT.
6. VALVE, VALVE BOX, & PAD SHALL BE INSTALLED PER THE TOHO VALVE & BOX DETAIL TOHO-17.

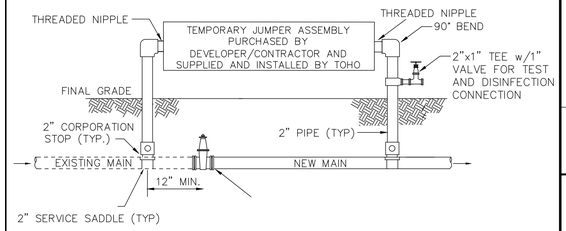
Toho Water Authority	EFFECTIVE DATE:	04/01/2025	FIRE HYDRANT	DRAWING 26
	BOARD APPROVED DATE:	01/28/2025		
	PREVIOUS VERSION:	0022		
	DRAWN BY:	MP		
	REVISED BY:	DT		



NOTES:

1. PRIOR TO SETTING METERS, ALL PROPERTY CORNERS AND BACK OF SIDEWALK SHALL BE STAKED.
2. ALL METER BOXES AND VAULTS SHALL BE SET PER DETAILS TOHO-01.0, TOHO-01.1, TOHO-02.0, AND TOHO-03.0, 03.1, AND 03.2
3. ALL CLEANOUTS SHALL BE SET PER DETAIL TOHO-06.0 AND TOHO-06.1. NO CLEANOUTS SHALL BE PLACED IN SIDEWALKS OR WALKWAYS.
4. THE HOMEBUILDER SHALL BE RESPONSIBLE FOR MAINTAINING NEWLY INSTALLED AND/OR EXISTING HYDRANTS, AUTOMATIC FLUSHING DEVICES, VALVES, MANHOLES, AND SERVICES UNTIL SUCH TIME AS THE CERTIFICATE OF OCCUPANCY IS ISSUED BY THE PERMITTING AUTHORITY. THE HOMEBUILDER'S RESPONSIBILITY SHALL EXTEND FROM PROPERTY LINE TO PROPERTY LINE AND FROM THE MIDDLE OF THE ROAD TO THE EDGE OF THE UTILITY EASEMENT ON THE PROPERTY AS WELL AS ADJACENT/ADJOINING COMMON AREAS.
5. NO PLANTINGS, STRUCTURES, OR OTHER UTILITIES, INCLUDING BUT NOT LIMITED TO TELECOM PEDESTALS, ELECTRICAL TRANSFORMERS OR POLES, ETC. SHALL BE INSTALLED WITHIN 36" OF ANY METER BOX, CLEANOUT, VALVE, OR AUTOMATIC FLUSHING DEVICE

Toho Water Authority	EFFECTIVE DATE:	04/01/2025	SERVICE LOCATIONS	DRAWING 29
	BOARD APPROVED DATE:	01/28/2025		
	PREVIOUS VERSION:	0022		
	DRAWN BY:	MP		
	REVISED BY:	DT		



NOTES:

1. A TEMPORARY JUMPER CONNECTION IS REQUIRED AT ALL CONNECTIONS BETWEEN EXISTING FDEP CLEARED POTABLE AND REUSE WATER MAINS AND PERMITTED WATER AND REUSE MAIN IMPROVEMENTS.
2. THE DETAIL ABOVE IS TO BE USED FOR PIGGING AND PRESSURE TESTING ALL PRESSURE MAINS AND FILLING, CHLORINATING, AND SAMPLING NEW POTABLE WATER MAINS.
3. UNTIL SUCH TIME AS FDEP HAS CLEARED THE POTABLE WATER MAIN FOR USE, OR TOHO HAS CLEARED THE POTABLE OR REUSE MAIN FOR USE IF NO FDEP PERMIT IS REQUIRED, THE JUMPER MUST REMAIN ON AND THE VALVE BETWEEN THE OLD AND NEW SYSTEMS MUST REMAIN CLOSED.
4. THE DEVELOPER AND/OR CONTRACTOR WILL PURCHASE THE TEMPORARY JUMPER ASSEMBLY FROM TOHO. ONLY JUMPERS PURCHASED AND INSTALLED BY TOHO ARE PERMITTED.
5. REMOVAL OR RELOCATION OF JUMPERS SHALL ONLY BE PERFORMED BY TOHO PERSONNEL.
6. 2" TAPS AND SERVICES UPSTREAM AND DOWNSTREAM OF THE JUMPER ASSEMBLY SHALL BE PER DETAIL TOHO-01.0, TOHO-01.1, AND TOHO-02.0.
7. GALVANIZED PIPE AND/OR FITTINGS ARE NOT ALLOWED.
8. ABANDONED JUMPER CONNECTIONS MUST BE INCLUDED ON THE FINAL RECORD DRAWINGS.

Toho Water Authority	EFFECTIVE DATE:	04/01/2025	TEMPORARY JUMPER	DRAWING 30
	BOARD APPROVED DATE:	01/28/2025		
	PREVIOUS VERSION:	0022		
	DRAWN BY:	MP		
	REVISED BY:	DT		

DATE	REVISION
Mar. 2025	Revised per TVA comments dated Feb. 2025

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

TOHO WATER AUTHORITY
WATER DETAILS

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

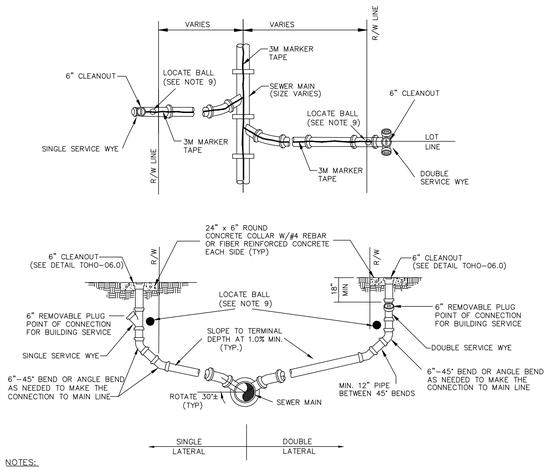
DATE
June 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
NONE

SHEET NUMBER
31

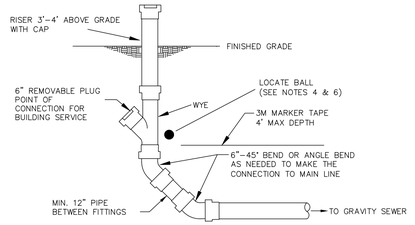


NOTES:

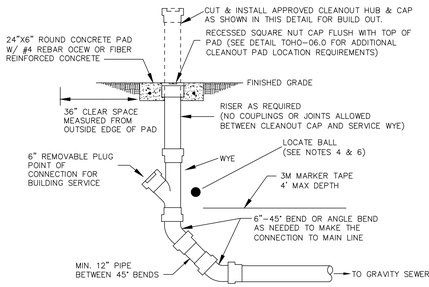
1. ALL RESIDENTIAL AND COMMERCIAL LATERALS SHALL BE 6".
2. THE SINGLE 6" RISER DENOTES THE END OF TOHO'S MAINTENANCE RESPONSIBILITY.
3. THE SINGLE 6" TOHO CLEANOUT SHALL BE PLACED ON THE LOT LINE AND WITHIN 24" OF THE RIGHT-OF-WAY LINE.
4. NO CLEANOUTS SHALL BE PLACED WITHIN THE RIGHT-OF-WAY OR IN A SIDEWALK OR WALKWAY.
5. LATERALS SHALL NOT EXCEED 100' FROM THE MAIN TO TOHO'S CLEANOUT.
3. LATERALS SHALL BE MARKED WITH A 3" HIGH "S" IN THE CURB OR SIDEWALK ADJACENT TO A PARKING SPACE WHERE THE LATERAL CROSSES THE CURB OR SIDEWALK. MARK SHALL BE PAINTED GREEN.
4. CONNECTIONS TO THE TOHO CLEANOUT'S VERTICAL STANDPIPE ARE NOT PERMITTED.
5. FITTINGS USED SHALL NOT EXCEED 45 DEGREES. A MINIMUM OF 12" OF PIPE IS REQUIRED BETWEEN ALL FITTINGS.
6. THE SERVICE WYE ON THE 6" VERTICAL STANDPIPE SHALL BE BETWEEN 18" AND 48" FROM FINISHED GRADE.
7. NO PLANTINGS, STRUCTURES, OR OTHER UTILITIES, INCLUDING BUT NOT LIMITED TO TELECOM PEDESTALS, ELECTRICAL TRANSFORMERS OR POLES, OR OTHER CLEANOUTS USED FOR TESTING PURPOSES SHALL BE INSTALLED WITHIN 36" OF ANY SIDE OF THE TOHO CLEANOUT.
8. PLACE TOHO APPROVED 3M MARKER TAPE FROM THE MAIN TO THE SINGLE OR DOUBLE SERVICE WYE:
   8.1. TAPE SHALL BE BURIED NO DEEPER THAN 4'.
   8.2. IF MARKER TAPE IS INSTALLED MORE THAN 18" ABOVE A LATERAL DUE TO DEPTH OF THE PIPE, ADDITIONAL TOHO APPROVED WARNING TAPE SHALL BE REQUIRED 12" – 18" ABOVE THE PIPE.
9. PROVIDE TOHO APPROVED LOCATE BALLS AT ALL SINGLE AND DOUBLE SERVICE WYES.
10. SEE SANITARY CLEANOUT DETAIL TOHO-06 FOR ADDITIONAL NOTES AND REQUIREMENTS.

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/08/2025
PREVIOUS VERSION:	2022
DRAWN BY:	MP
REVISED BY:	DT

SANITARY SEWER LATERAL — DRAWING NUMBER 05



UN-DEVELOPED LOT

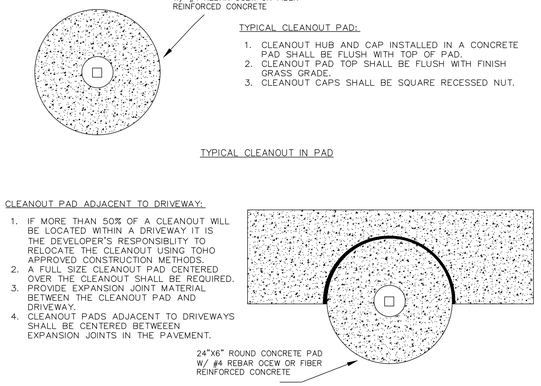


NOTES:

1. SITE CONTRACTOR SHALL LEAVE THE CLEANOUT RISER 3' – 4' ABOVE FINISHED GRADE. AT LOT BUILD OUT THE RISER SHALL BE CUT AND CAPPED WITH A CLEANOUT HUB AND CAP INSTALLED IN A CONCRETE PAD SET FLUSH WITH FINISH GRADE OR IN A CAST IRON HANDHOLE IF IN A DRIVEWAY.
2. CLEANOUT CAPS SHALL HAVE A RECESSED SQUARE NUT.
3. NO PLANTINGS, STRUCTURES, OR OTHER UTILITIES, INCLUDING BUT NOT LIMITED TO TELECOM PEDESTALS, ELECTRICAL TRANSFORMERS OR POLES, OR OTHER CLEANOUTS USED FOR TESTING PURPOSES SHALL BE INSTALLED WITHIN 36" OF ANY SIDE OF THE TOHO CLEANOUT.
4. PROVIDE TOHO APPROVED LOCATE BALLS AT ALL SINGLE AND DOUBLE SERVICE WYES.
5. PLUMBER SHALL CONNECT TO SERVICE WYE WITH GASKETED PUSH FITTING ONLY. GLUE OR NON GASKETED FITTINGS SHALL NOT BE PERMITTED.
6. SEE SANITARY SEWER LATERAL DETAIL TOHO-05 AND SANITARY SEWER CLEANOUT PAD TOHO-06.1 FOR ADDITIONAL NOTES AND REQUIREMENTS.

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/08/2025
PREVIOUS VERSION:	2022
DRAWN BY:	MP
REVISED BY:	DT

SANITARY SEWER CLEANOUT — DRAWING NUMBER 06.0

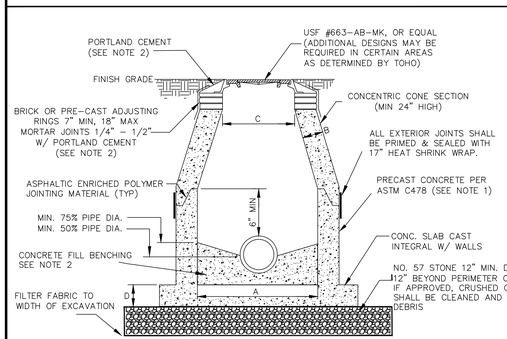


GENERAL NOTES:

1. CLEANOUTS ARE NOT PERMITTED WITHIN SIDEWALKS, ENTRY WALKS, OR ANY OTHER PAVED AREA INTENDED FOR FOOT TRAFFIC ONLY.
2. LATERALS SHALL BE MARKED WITH A 3" HIGH 'S' ON THE CURB OR SIDEWALK ADJACENT TO A PARKING SPACE WHERE THE LATERAL CROSSES THE CURB OR SIDEWALK.
3. NO PLANTINGS, STRUCTURES, OR OTHER UTILITIES, INCLUDING BUT NOT LIMITED TO TELECOM PEDESTALS, ELECTRICAL TRANSFORMERS OR POLES, METER BOXES, OR OTHER CLEANOUTS USED FOR TESTING PURPOSES SHALL BE INSTALLED WITHIN 36" OF ANY SIDE OF A TOHO CLEANOUT.
4. SEE SANITARY SEWER LATERAL DETAIL TOHO-05 AND SANITARY CLEANOUT DETAIL TOHO-06.0 FOR ADDITIONAL NOTES AND REQUIREMENTS.

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/02/2025
PREVIOUS VERSION:	NA
DRAWN BY:	DT
REVISED BY:	DT

SANITARY SEWER CLEANOUT PAD — DRAWING NUMBER 06.1



M.H. DEPTH	A*	B	C	D
UP TO 11.99'	48"	6"	36"	8"
12' – 15' *	60"	8"	36"	10"

* MANHOLES 12' OR DEEPER ALLOWED ONLY ON CASE-BY-CASE BASIS WITH CEO/EXECUTIVE DIRECTOR APPROVAL

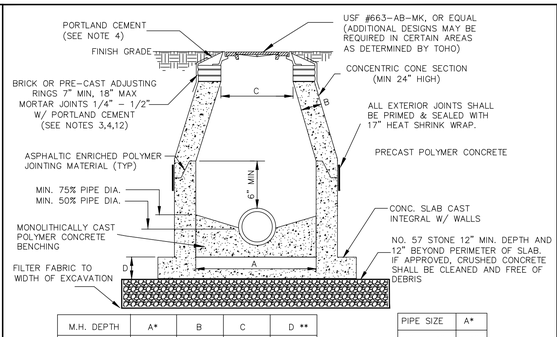
PIPE SIZE	A*
6" – 12"	48"
14" – 24"	60"
> 24"	72"

NOTES:

1. PRECAST CONCRETE SHALL BE TYPE 2 CEMENT, 4000 PSI WITH XYPEX ADMIX C-1000 RED, XYPEX XYCRYLIC ADMIX, OR APPROVED EQUAL.
2. ALL PORTLAND CEMENT, GROUT, OR CONRETE FILL USED INSIDE OR OUTSIDE OF A NON-POLYMER MANHOLE SHALL REQUIRE XYPEX C-1000 RED, XYPEX XYCRYLIC ADMIX OR APPROVED EQUAL.
3. ALL OPENINGS, CHIPS, LIFT HOLES, ETC. SHALL BE SEALED WITH PORTLAND CEMENT WITH XYPEX ADMIX C-1000 RED, XYPEX XYCRYLIC ADMIX, OR APPROVED EQUAL.
4. LIFT HOLES ARE NOT PERMITTED THROUGH PRECAST SECTIONS.
5. REINFORCING STEEL PER ASTM C478 (MOST RECENT EDITION) SHALL BE REQUIRED.
6. MANHOLE DESIGNS MUST MAINTAIN A MINIMUM OF 50% UNINTERRUPTED WALL AREA ON ANY HORIZONTAL PLANE AND A MINIMUM OF 12" BETWEEN WALL PENETRATIONS.
7. CONCENTRIC FLAT TOP SLABS ARE ONLY ALLOWED WHERE THE DEPTH OF COVER OVER THE PIPE IS LESS THAN 48" OR WHERE OTHERWISE APPROVED BY TOHO.
8. SERVICE LATERALS SHALL BE PERMITTED DIRECTLY INTO MANHOLES MATCHING THE CROWN ELEVATION OF THE OUTFLOW PIPE ONLY, DROPS OR FILLETED FLUMES ARE NOT PERMITTED FOR LATERALS.
9. THIS DETAIL SHALL NOT APPLY TO THE FOLLOWING MANHOLES. REFERENCE THE POLYMER MANHOLE DETAIL TOHO-07.1 FOR ADDITIONAL REQUIREMENTS:
   9.1. MANHOLES 12' OR DEEPER.
   9.2. MANHOLES THAT RECEIVE FORCE MAINS.
   9.3. MANHOLES WITH DROP CONNECTIONS.
   9.4. MANHOLES WITHIN 400' UPSTREAM OR DOWNSTREAM OF 9.2 OR 9.3 ABOVE.
10. WHERE MANHOLES ARE NOT IN PAVED AREAS OR COMPLETELY PROTECTED FROM VEHICULAR TRAFFIC, A CONCRETE COLLAR PER TOHO-26 SHALL BE REQUIRED.

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/08/2025
PREVIOUS VERSION:	2022
DRAWN BY:	MP
REVISED BY:	DT

STANDARD MANHOLE — DRAWING NUMBER 07.0



M.H. DEPTH	A*	B	C	D **
UP TO 11.99'	48"	2"	36"	6"
12' – 15' *	60"	2"	36"	6"

* MANHOLES 12' OR DEEPER ALLOWED ONLY ON CASE-BY-CASE BASIS WITH CEO/EXECUTIVE DIRECTOR APPROVAL

** BASE DEPTH AND REINFORCEMENT TO BE DESIGNED BY MANHOLE PRECASTER AND APPROVED BY TOHO

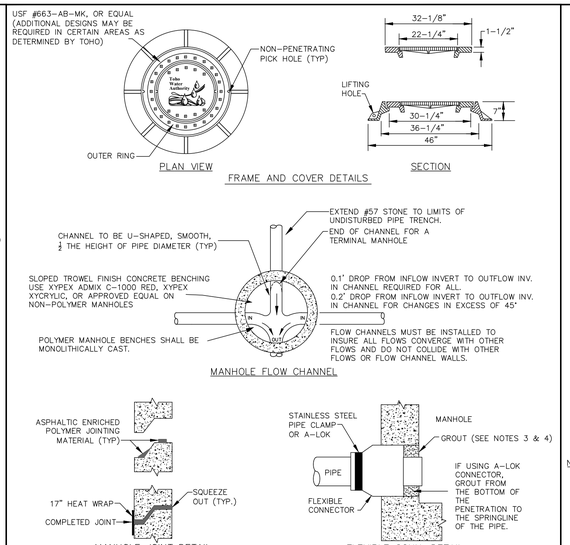
PIPE SIZE	A*
6" – 12"	48"
14" – 24"	60"
> 24"	72"

NOTES:

1. THIS DETAIL SHALL APPLY TO THE FOLLOWING MANHOLES:
   1.1. MANHOLES 12' OR DEEPER.
   1.2. MANHOLES THAT RECEIVE FORCE MAINS.
   1.3. MANHOLES WITH DROP CONNECTIONS.
   1.4. MANHOLES WITHIN 400' UPSTREAM OR DOWNSTREAM OF 10.2 OR 10.3 ABOVE.
2. PRECAST BASE, RISER(S), AND CONE SECTIONS SHALL BE POLYMER CONCRETE.
3. ALL GROUT FILL USED INSIDE A POLYMER MANHOLE SHALL BE POLYMER GROUT AS SPECIFIED BY THE MANHOLE PRECASTER.
4. ALL PORTLAND CEMENT, GROUT, OR CONRETE FILL USED OUTSIDE OF A POLYMER MANHOLE SHALL REQUIRE XYPEX ADMIX C-1000 RED, XYPEX XCRYLIC ADMIX, OR APPROVED EQUAL.
5. ALL INTERIOR OPENINGS, CHIPS, LIFT HOLES, ETC. SHALL BE SEALED WITH POLYMER GROUT AS SPECIFIED BY THE MANHOLE PRECASTER.
6. LIFT HOLES ARE NOT PERMITTED THROUGH PRECAST SECTIONS.
7. REINFORCEMENT OF THE PRECAST BASE, RISER(S), AND CONE SHALL BE DESIGNED BY THE MANHOLE PRECASTER AND APPROVED BY TOHO.
8. MANHOLE DESIGNS MUST MAINTAIN A MINIMUM OF 50% UNINTERRUPTED WALL AREA ON ANY HORIZONTAL PLANE AND A MINIMUM OF 12" BETWEEN WALL PENETRATIONS.
9. CONCENTRIC FLAT TOP SLABS ARE ONLY ALLOWED WHERE THE DEPTH OF COVER OVER THE PIPE IS LESS THAN 48" OR WHERE OTHERWISE APPROVED BY TOHO.
10. SERVICE LATERALS SHALL BE PERMITTED DIRECTLY INTO MANHOLES MATCHING THE CROWN ELEVATION OF THE OUTFLOW PIPE ONLY, DROPS OR FILLETED FLUMES ARE NOT PERMITTED FOR LATERALS.
11. WHERE MANHOLES ARE NOT IN PAVED AREAS OR COMPLETELY PROTECTED FROM VEHICULAR TRAFFIC, A CONCRETE COLLAR PER TOHO-26 SHALL BE REQUIRED.
12. POLYMER GROUT AS SPECIFIED BY THE MANHOLE PRECASTER SHALL BE USE TO SKIM COAT THE INTERIOR SURFACE OF THE BRICK RISER / ADJUSTMENT RING(S).

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/28/2025
PREVIOUS VERSION:	NA
DRAWN BY:	DT
REVISED BY:	DT

POLYMER MANHOLE — DRAWING NUMBER 07.1



NOTES:

1. ALL EXTERIOR JOINTS SHALL BE CLEANED, PRIMED, DRIED, AND SEALED WITH 17" HEAT SHRINK WRAP.
2. EXCESS JOINT COMPOUND SHALL BE TRIMMED FROM INTERIOR WALLS.
3. ALL PORTLAND CEMENT, GROUT, OR CONCRETE FILL USED INSIDE NON-POLYMER MANHOLES OR OUTSIDE OF NON-POLYMER AND POLYMER MANHOLES SHALL REQUIRE XYPEX C-1000 RED, XYPEX XYCRYLIC ADMIX OR APPROVED EQUAL.
4. ALL PORTLAND CEMENT, GROUT, OR CONCRETE FILL USED INSIDE POLYMER MANHOLES SHALL REQUIRE POLYMER GROUT AS SPECIFIED BY THE MANHOLE PRECASTER.
5. CONCENTRIC FLAT TOP SLABS ARE ONLY ALLOWED WHERE THE DEPTH OF COVER OVER THE PIPE IS LESS THAN 48" OR WHERE OTHERWISE APPROVED BY TOHO.
6. CONNECTIONS TO BRICK MANHOLES SHALL BE COMPLETED UTILIZING SDR35 OR SDR26 SAND COLLAR(S) AND 4,000PSI CONCRETE WITH XYPEX C-1000 RED, XYCRYLIC ADMIX OR APPROVED EQUAL.

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/28/2025
PREVIOUS VERSION:	2022
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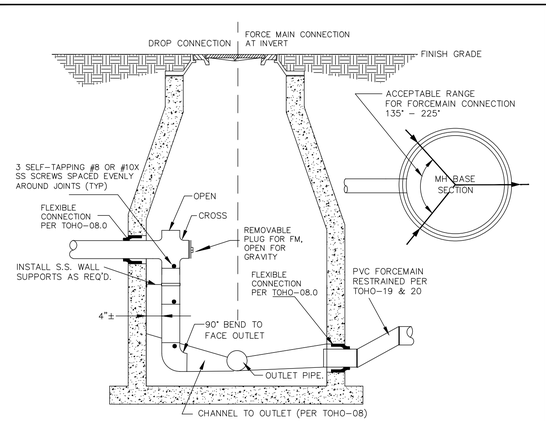
REVISED BY:	DT

MISCELLANEOUS MANHOLE — DRAWING NUMBER 08.0



Notes:

1. WHEN PROVIDING A DROP OR FORCE MAIN CONNECTION TO AN EXISTING MANHOLE, REFER TO STANDARD MANHOLE DETAIL TOHO-07.0 AND MISCELLANEOUS MANHOLE DETAIL TOHO-08.0 FOR ADDITIONAL REQUIREMENTS.
2. WHEN PROVIDING A DROP OR FORCE MAIN CONNECTION TO A NEW MANHOLE, REFER TO POLYMER MANHOLE DETAIL TOHO-07.1, AND MISCELLANEOUS MANHOLE DETAIL TOHO-08.0 FOR ADDITIONAL REQUIREMENTS.
3. MANHOLE SHALL BE 60" DIAMETER MINIMUM.
4. PIPING LARGER THAN 12" SHALL HAVE EXTERIOR DROP CONNECTION DESIGNED BY AN ENGINEER AND APPROVED BY TOHO.
5. EACH SECTION OF INTERIOR DROP PIPING SHALL HAVE NO LESS THAN 2 SUPPORTS SPACED NO FURTHER APART THAN 8'.
6. INTERIOR DROP PIPING SHALL BE GASKETED BELL AND SPIGOT MATCHING THE INCOMING PIPE SIZE AND DIMENSION RATIO.
7. ALL NEW MANHOLES WITH A DROP OR FORCE MAIN CONNECTION AND/OR ALL NEW MANHOLES THAT ARE WITHIN 400' UPSTREAM AND DOWNSTREAM OF A NEW OR EXISTING DROP OR FORCE MAIN CONNECTION SHALL REQUIRE POLYMER MANHOLES PER DETAIL TOHO-07.1.
8. ALL EXISTING MANHOLES THAT RECEIVE A NEW DROP CONNECTION OR FORCE MAIN CONNECTION OR EXISTING MANHOLES WITHIN 400' UPSTREAM AND DOWNSTREAM OF A NEW MANHOLE WITH A DROP OR FORCE MAIN CONNECTION SHALL REQUIRE A TOHO APPROVED SPRAY ON OR TROWEL ON LINER.
9. FORCE MAIN CONNECTIONS SHALL BE ALLOWED AT EFFLUENT INVERT ELEVATION +0.1' AND FROM 135 TO 225 DEGREES FROM THE EFFLUENT OUTLET.
10. DROP FORCE MAIN CONNECTIONS SHALL BE APPROVED BY TOHO ON A CASE-BY-CASE BASIS.

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/02/2025
PREVIOUS VERSION:	2022
DRAWN BY:	MP
REVISED BY:	DT

DROP OR FORCE MAIN CONNECTION TO MANHOLE — DRAWING NUMBER 09

REVISION	DATE
Revised per TVA comments dated Feb. 2025	Mar. 2025

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

TOHO WATER AUTHORITY SEWER DETAILS

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
June 2025

DRAWN BY
TLK/JMK

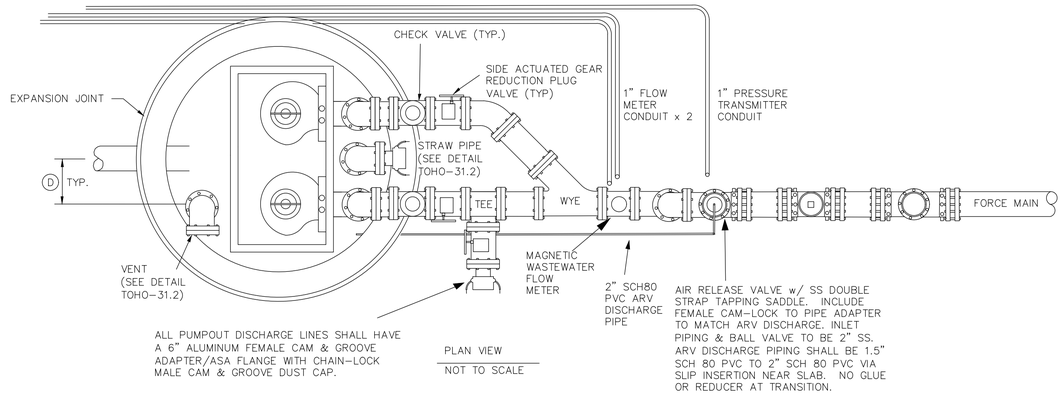
PROJECT NUMBER
23-12

SCALE
NONE

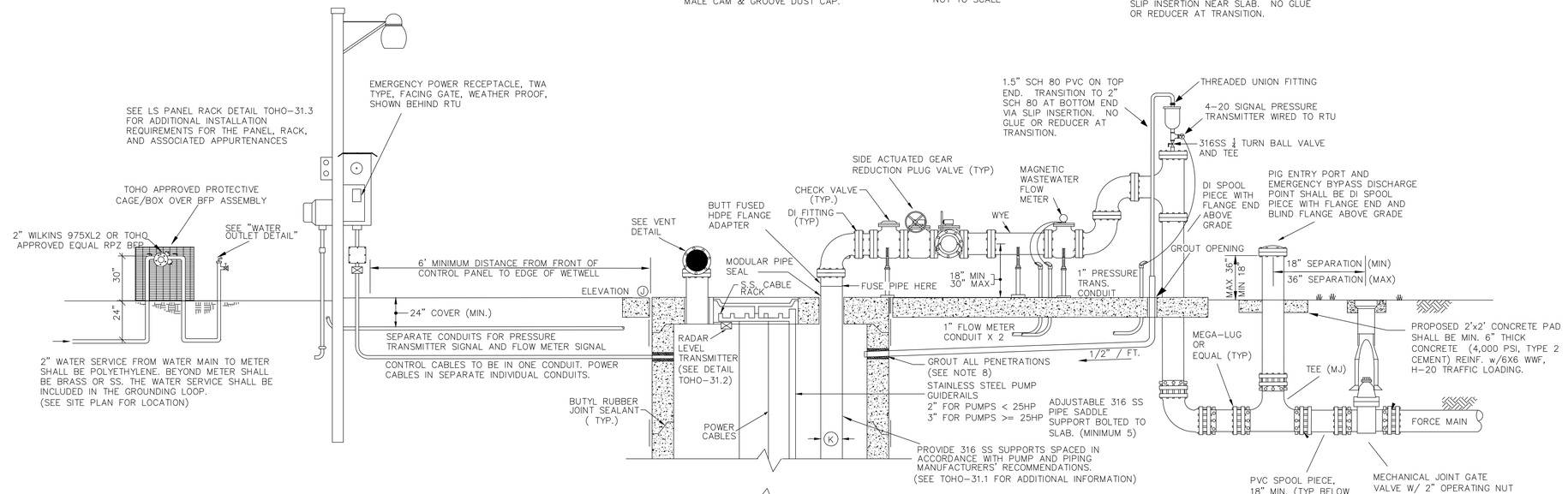
SHEET NUMBER
32

GENERAL NOTES:

1. ALL ITEMS NOT SPECIFIED ON THESE DETAIL SHEETS SHALL MEET CURRENT TOHO STANDARDS AND SPECIFICATIONS.
2. ALL LIFT STATION WET WELLS SHALL BE PRECAST POLYMER CONCRETE.
3. NO LIFTING HOLES ARE PERMITTED THRU WALLS OR TOP SLAB.
4. ALL ABOVE GROUND FORCE MAIN PIPING SHALL BE FLANGED DUCTILE IRON.
5. SPOOL PIECES ABOVE GRADE SHALL BE FLANGED DUCTILE IRON.
   5.1. PROVIDE AN 18" SPOOL PIECE UPSTREAM OF EACH CHECK VALVE.
   5.2. THE NUMBER AND LENGTH OF SPOOL PIECES DOWNSTREAM OF THE CHECK VALVE SHALL BE KEPT TO A MINIMUM AND USED ONLY AS NECESSARY TO ACHIEVE PROPER ALIGNMENT OF THE ASSEMBLY.
6. ALL CONDUIT SHALL BE RIGID ALUMINUM EXCEPT FOR THE CONDUIT FROM THE TRANSFORMER TO THE 2ND DISCONNECT AFTER THE METER.
7. FINISHED GRADE INSIDE THE FENCED AREA SHALL BE A MINIMUM OF 12" ABOVE THE 100 YEAR FLOOD AND 6" ABOVE THE GROUND ELEVATION OF THE HEIGHEST FENCE POST.
8. ALL PENETRATIONS, INTERIOR OPENINGS, CHIPS, LIFT HOLES, ETC. SHALL BE SEALED WITH POLYMER GROUT AS SPECIFIED BY THE MANHOLE PRECASTER.
9. SEE PANEL DRAWING(S) FOR TELEMETRY SYSTEM DETAILS.
10. TELEMETRY SHALL BE PAID FOR BY THE DEVELOPER AND FURNISHED, INSTALLED, AND PROGRAMMED BY TOHO.
11. THE CELLULAR ANTENNA WILL BE PROVIDED AND INSTALLED BY TOHO.
12. ALL ENCLOSURE PENETRATIONS SHALL BE MADE ON THE BOTTOM OF THE ENCLOSURE. TOP AND SIDE PENETRATIONS ARE NOT PERMITTED EXCEPT ON TVSS. USE MYERS HUBS EXCEPT BETWEEN METER AND DISCONNECT AND TVSS.
13. ALL BOXES AND ENCLOSURES SHALL BE NEMA 4X 316 STAINLESS STEEL.
    13.1. METER CAN SHALL BE PER UTILITY COMPANY.
14. RACK TO UTILIZE 316 STAINLESS STEEL STRUT CHANNEL AND HARDWARE WITH VINYL ENDCAPS.
15. ALL BOLTS AND WASHERS INSIDE THE WET WELL SHALL BE 316 SS.
16. ALL NUTS INSIDE THE WET WELL SHALL BE 316 SS LOCK NUTS.
17. ABOVE GROUND SHUT-OFF VALVES SHALL BE FLANGE END SIDE ACTUATED GEAR REDUCTION PLUG VALVES.
18. PRESSURE TRANSMITTER AND FLOW TRANSMITTER CABLES SHALL ENTER IN-GROUND CONDUIT VIA WEATHERHEAD SERVICE CAP.
19. IN-GROUND VALVES SHALL BE MECHANICAL JOINT END PLUG VALVES WITH 2" OPERATING NUT.



PLAN VIEW
NOT TO SCALE

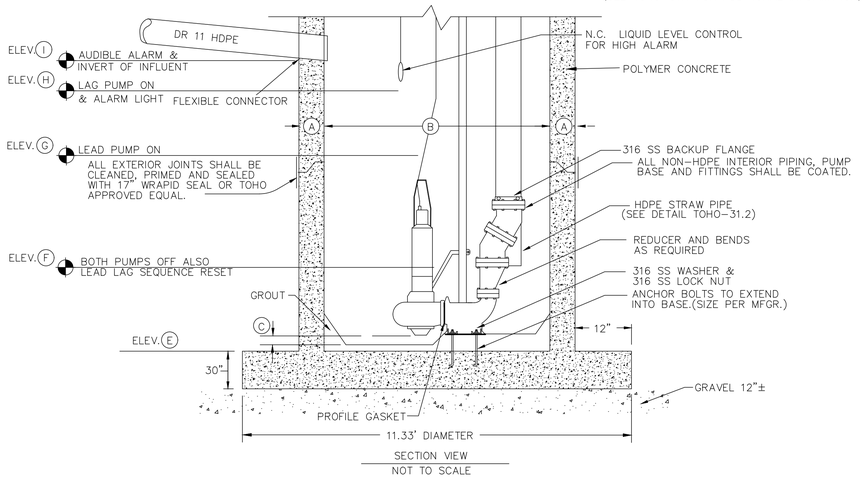


MARK	DIMENSIONS	DESCRIPTION	COMMENTS
DIM. A	8"	WETWELL WALL THICKNESS	PER PRECASTER SPECIFICATIONS
DIM. B	8'	WETWELL DIAMETER	8' MINIMUM
DIM. C	4"	PER PUMP SUBMITTAL DATA	
DIM. D	13"	DISTANCE BETWEEN CENTER OF INVERT AND CENTER OF PUMP	INFLOW SHALL NOT LAND ON ANY PORTION OF A PUMP INSIDE THE WELL
DIM. E	62.40	ELEVATION	BOTTOM OF WETWELL
DIM. F	64.74	ELEVATION	PUMPS OFF
DIM. G	66.74	ELEVATION	LEAD PUMP ON
DIM. H	67.24	ELEVATION	LAG PUMP ON
DIM. I	67.74	ELEVATION	AUDIBLE ALARM & INVERT
DIM. J	80.00	ELEVATION	TOP OF SLAB
DIM. K	4"	HDPE DR11 DIAMETER	DISCHARGE
DIM. L	17.60'	*EQUAL TO DEPTH OF WETWELL.*	*15' MIN W/ NO ODOR CONTROL 20' MIN W/ ODOR CONTROL REQ'D*
FLOOD ZONE DESIGNATION		FLOOD ELEV.	VERT DATUM "NAVD"

PUMP MANUFACTURER: KSB *MODEL:* ARX D-MAX 100-180/0-36F4YSG2 *HP:* 5

IMPELLER: 6.625" 115 *GPM at* 35 ft *TDH*

SPEED: 1703 RPM *ELECTRICAL:* 460V, 3 PHASE



SECTION VIEW
NOT TO SCALE

THIS DETAIL IS NOT INTENDED TO ENCOMPASS ALL CONSTRUCTION DETAILS FOR LIFT STATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REFER TO ALL OF TOHO'S LS DETAILS AS WELL AS THE STANDARDS AND SPECIFICATIONS MANUAL.

DRAWING NUMBER
31.0

STANDARD LIFT STATION DETAIL

DATE	REVISION
Mar. 2025	Revised per TWA comments dated Feb. 2025

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

TOHO WATER AUTHORITY LIFT STATION DETAILS

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/22/2025
PREVIOUS VERSION:	2022
DRAWN BY:	MP
REVISED BY:	DT

Toho Water Authority

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
June 2025

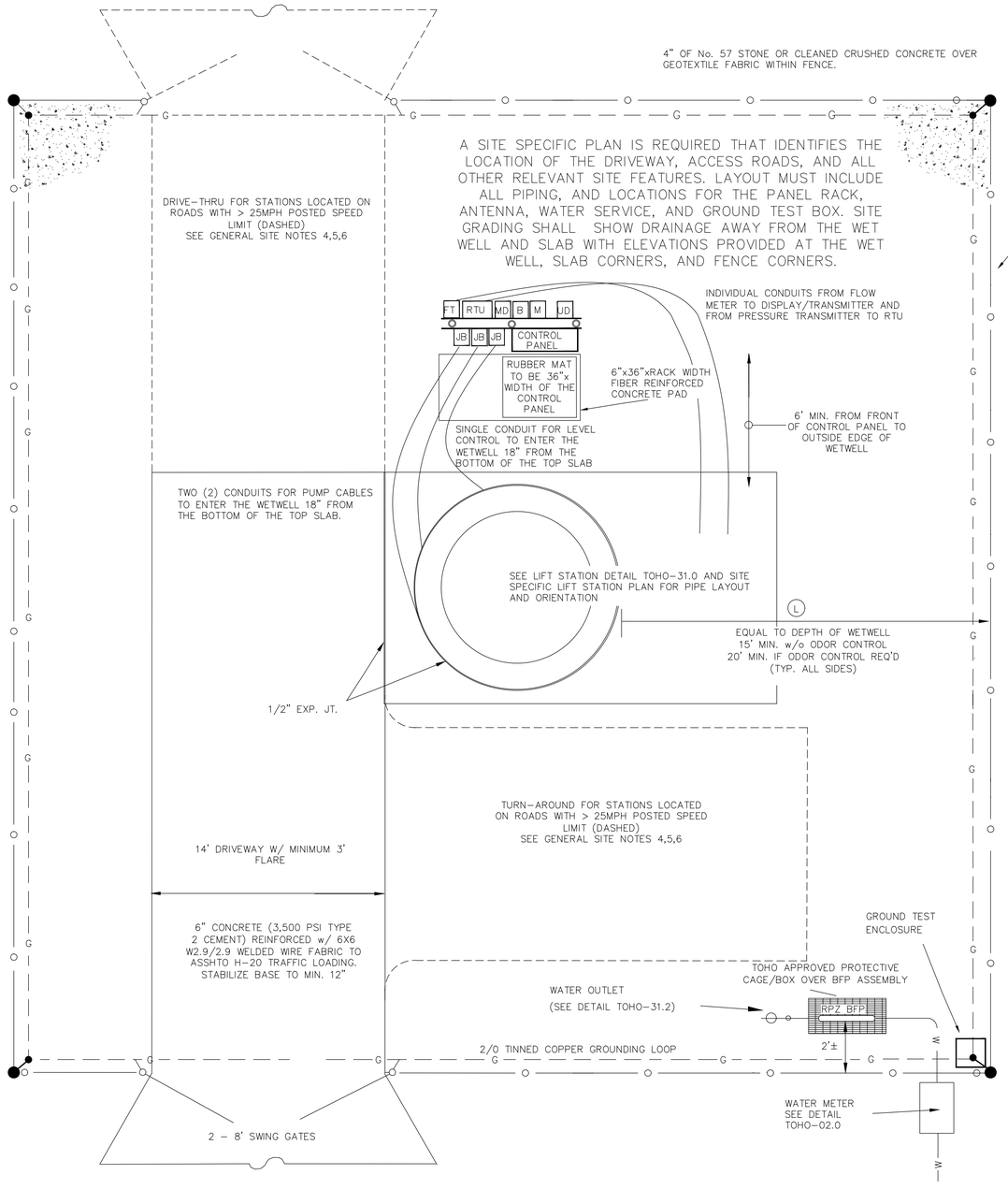
DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
NONE

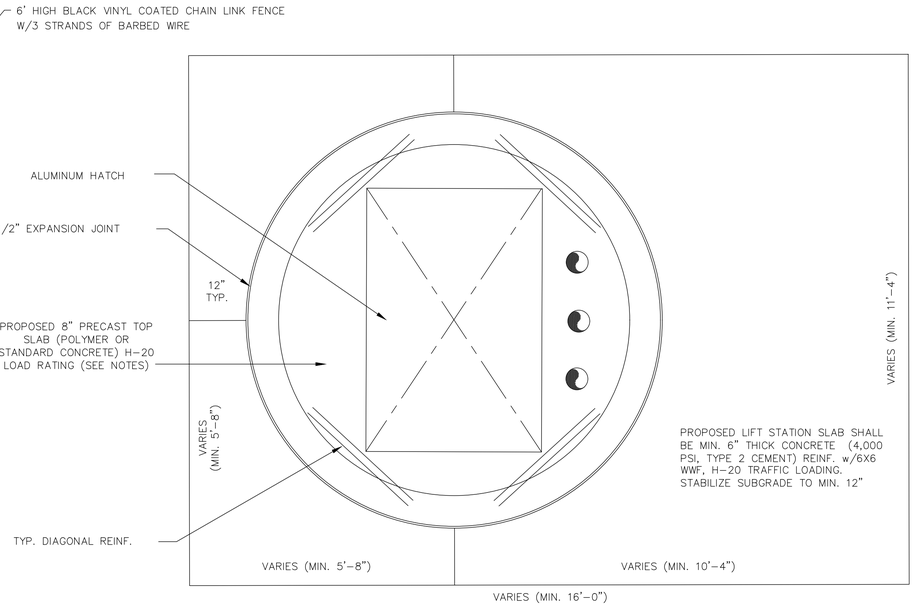
SHEET NUMBER
33

THIS DETAIL IS NOT INTENDED TO ENCOMPASS ALL CONSTRUCTION DETAILS FOR LIFT STATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REFER TO ALL OF TOHO'S LIFT STATION DETAILS AS WELL AS TOHO'S STANDARDS AND SPECIFICATIONS MANUAL.



YARD PLAN

NOT TO SCALE



TYPICAL LIFT STATION SLAB DETAIL

NOT TO SCALE

LIFT STATION SLAB NOTES:

1. SAWCUT 2" DEEP JOINT AS SHOWN. SAW CUTTING TO BE PERFORMED IMMEDIATELY AFTER PLACEMENT, AS SOON AS CONCNRETE IS FIRM ENOUGH TO SUPPORT THE SAW AND NOT BE TORN OR DAMAGED BY THE BLADE.
2. PROVIDE SAWCUTS EVERY 12' IN LENGTH AND WIDTH OF ACCESS DRIVEWAY AND LIFT STATION SLAB AS SHOWN.
3. SEE CIVIL DRAWINGS FOR SLAB LOCATION AND DIMENSIONS.
4. TOP SHLAB SHALL BE POLYMER OR STANDARD CONCRETE, ALL OTHER WET WELL CONCRETE SECTIONS SHALL BE POLYMER ONLY.

HATCH NOTES:

1. ALUMINUM ACCESS HATCH SHALL BE HALLIDAY SERIES W2S OR APPROVED EQUAL WITH ALUMINUM FALL PROTECTION GRATING.
2. HATCH SHALL INCLUDE SLAMLOCK, SPRING ASSIST AND EPDM GASKET CUSHION.
3. LIFT HANDLE SHALL BE LOCATED OPPOSITE OF ABOVE GROUND PIPING AND HATCH SHALL OPEN TOWARDS PIPING.

GENERAL SITE NOTES:

1. YARD PIPING PLAN IS A GENERIC PLAN SHOWING REQUIRED PIPING AND MINIMUM CLEARANCES, SEPARATIONS, AND SITE SIZING REQUIREMENTS
2. A LAYOUT DEVIATING FROM THIS DETAIL SHALL BE DRAWN TO SCALE AND SHOW WETWELL PUMPS AND INFLUENT AND EFFLUENT PIPING TO ENSURE SUFFICIENT SPACE WITHIN THE WETWELL TO ACCOMODATE ALL MECHANICAL EQUIPMENT AND PIPING
3. ELECTRICAL TRANSFORMERS MUST BE LOCATED OUTSIDE OF THE FENCED AREA
4. PROPOSED 14' DRIVEWAY W/ MINIMUM 3' FLARE MUST EXTEND TO A PAVED PUBLIC OR PRIVATE ROADWAY
5. LIFT STATION SITES LOCATED ON ROADS WITH POSTED SPEED LIMITS OF 25MPH OR GREATER REQUIRE DRIVE-THRU OR TURNAROUND ACCESS
6. ENGINEER SHALL PROVIDE A TRANSOFT AUTO-TURN OR AUTODESK VEHICLE TRACKING ANALYSIS FOR A COMBINATION SEWER CLEANING VACTOR TRUCK

DRAWING NUMBER
31.1

MISCELLANEOUS LIFT STATION DETAILS - I

REVISION	DATE
Revised per TWA comments dated Feb. 2025	Mar. 2025

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
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OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

TOHO WATER AUTHORITY LIFT STATION DETAILS

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/22/2025
PREVIOUS VERSION:	2022
DRAWN BY:	MP
REVISED BY:	DT

Toho Water Authority

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

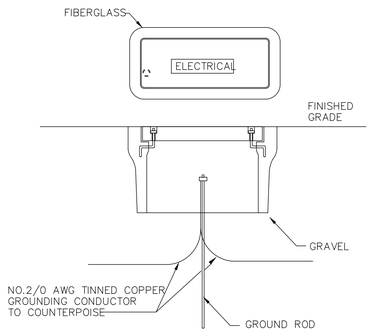
DATE
June 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
NONE

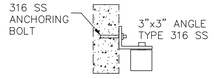
SHEET NUMBER
34



GROUND TEST ENCLOSURE

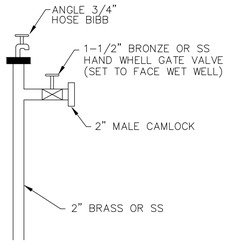
GROUNDING NOTES:

1. CONNECTIONS TO THE COUNTERPOISE LOOP SHALL BE CADWELDED TO THE GROUND ROD(S) AND ALL WIRE PIGTAILS.
2. CONNECTIONS TO THE COUNTERPOISE LOOP FOR THE FOLLOWING SHALL BE MECHANICALLY BONDED:
   - CORNER POSTS
   - GATE POSTS, GATE AND FENCE
   - WATER SERVICE
   - CONTROL PANEL
   - WET WELL HATCH AND HANDRAIL
   - DISCHARGE PIPING
   - ALL METAL CONDUIT ENTRIES INTO CONTROL PANEL BY MEANS OF GROUNDING BUSHINGS.
   - MAIN DISCONNECT SWITCH
   - UTILITY COMPANY TRANSFORMER
   - GENERATOR
   - ODOR CONTROL
   - SERVICE DISCONNECT SWITCH
   - TELEMETRY PANEL



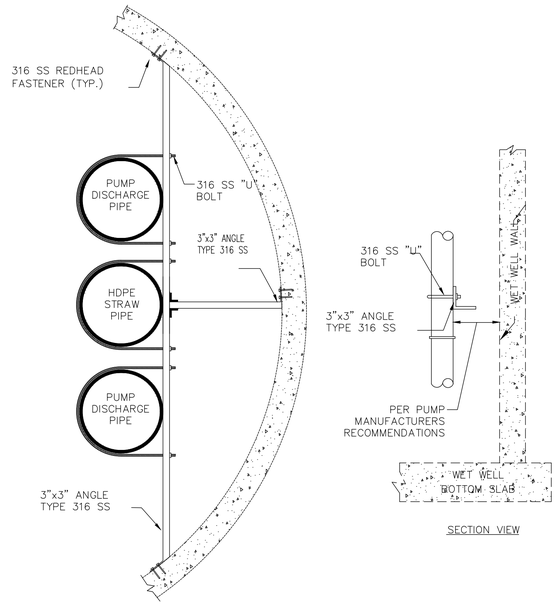
LEVEL TRANSMITTER MOUNTING

NOT TO SCALE



WATER OUTLET DETAIL

NOT TO SCALE



TOP VIEW

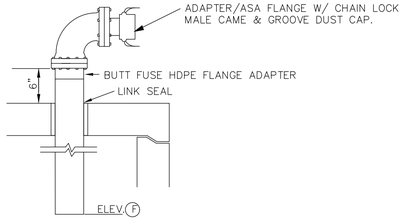
SECTION VIEW

NOTES:

1. ALL COMPONENTS AND BRACKET ASSEMBLIES INSIDE THE WET WELL SHALL BE 316 STAINLESS STEEL.
2. BRACKETS SHALL BE SPACED AS INDICATED IN THE APPROVED CONSTRUCTION DRAWINGS OR AT THE DIRECTION OF TOHO.
3. PIPE SIZES AND MATERIALS SHALL BE AS INDICATED IN THE APPROVED CONSTRUCTION DRAWINGS.
4. A MINIMUM OF WALL SUPPORT BRACKETS ARE REQUIRED WITH A MAX VERTICAL SPACING OF 10'.
5. WELD ALL CONNECTIONS EXCEPT U-BOLTS.

PIPE FASTENING BRACKET

NOT TO SCALE

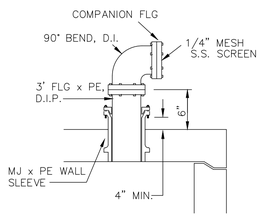


NOTES:

1. STRAW PIPE SHALL BE SIZED TO MATCH PUMP DISCHARGE PIPING.
2. SUPPORTS SHALL BE PROVIDED TO MATCH PUMP DISCHARGE PIPING REQUIREMENTS.
3. BOTTOM ELEVATION OF STRAW PIPE TO MATCH ELEVATION 'F' FROM LIFT STATION DETAIL TOHO-31.0

STRAW PIPE DETAIL

NOT TO SCALE



NOTE: SIZE VENT DIAMETER SAME AS DISCHARGE PIPING. LENGTH = SLAB THICKNESS PLUS 4"MIN.

VENT DETAIL

NOT TO SCALE

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DRAWING NUMBER
31.2

MISCELLANEOUS LIFT STATION DETAILS - II

REVISION	DATE
Revised per TWA comments dated Feb. 2025	Mar. 2025

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

TOHO WATER AUTHORITY LIFT STATION DETAILS

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/22/2025
PREVIOUS VERSION:	2022
DRAWN BY:	MP
REVISED BY:	DT

Toho Water Authority

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
June 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
NONE

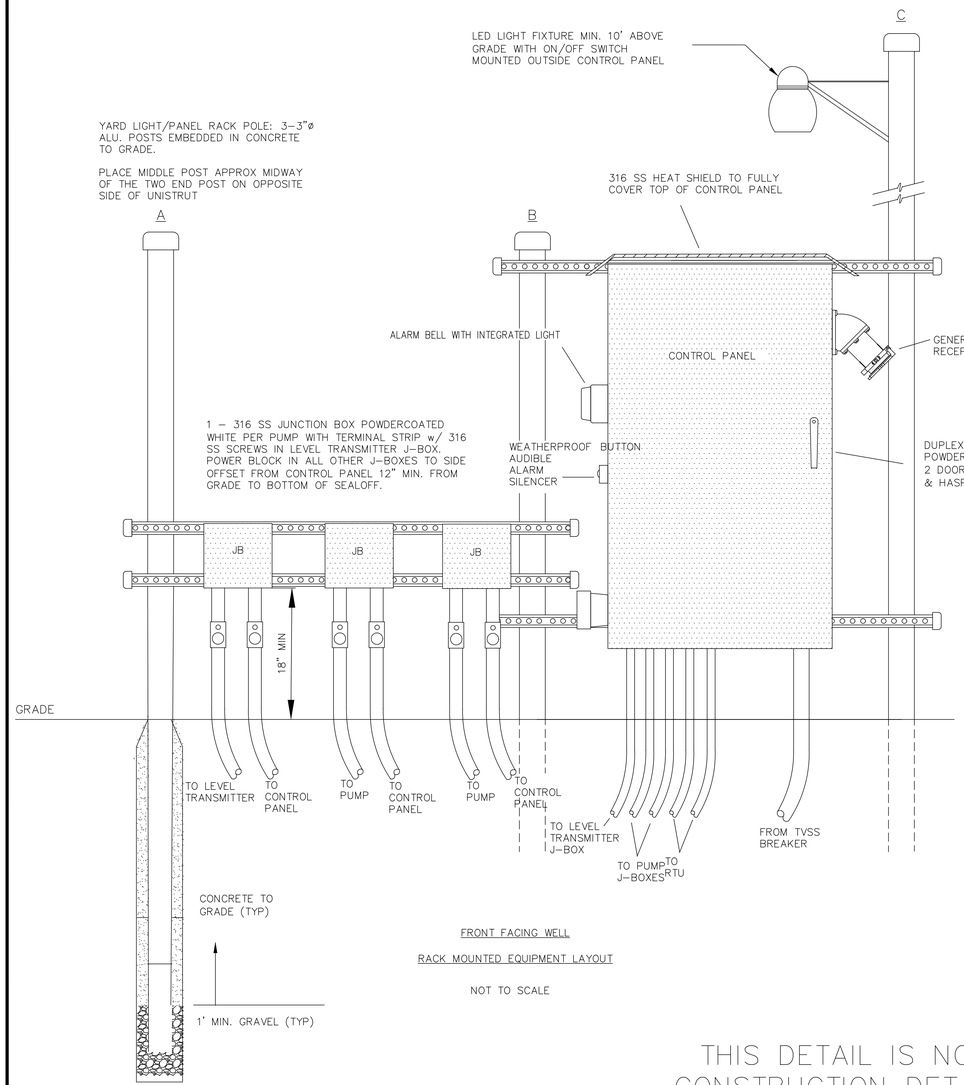
SHEET NUMBER
35

PANEL RACK NOTES:

1. CONTROL PANEL, RTU ENCLOSURE, AND JUNCTION BOXES SHALL BE 316SS POWDERCOATED WHITE
2. ALL CONDUIT SHALL BE SIZED TO ACCOMMODATE NO MORE THAN 40% CONDUIT FILL.
3. MINIMUM CONDUIT SIZE TO BE 1".
4. ALL SEAL OFFS SHALL BE TYPE EYSR.
5. ALL OPEN CONDUITS SHALL REQUIRE WEATHERHEAD INLETS.
6. ID PLATE ON ELECTRIC METER SHALL INCLUDE THE STATION NAME, TOHO DESIGNATED LS NUMBER, AND ADDRESS PERMANENTLY AFFIXED TO THE FRONT OF THE METER CABINET.
7. ALL HARDWARE INCLUDING BUT NOT LIMITED TO NUTS, BOLTS, WASHERS, STRUTS, ETC. SHALL BE 316 STAINLESS STEEL.
8. ALL PENETRATIONS SHALL BE THRU BOTTOM OF PANEL/ENCLOSURE/BOX

POWER SUPPLY NOTES:

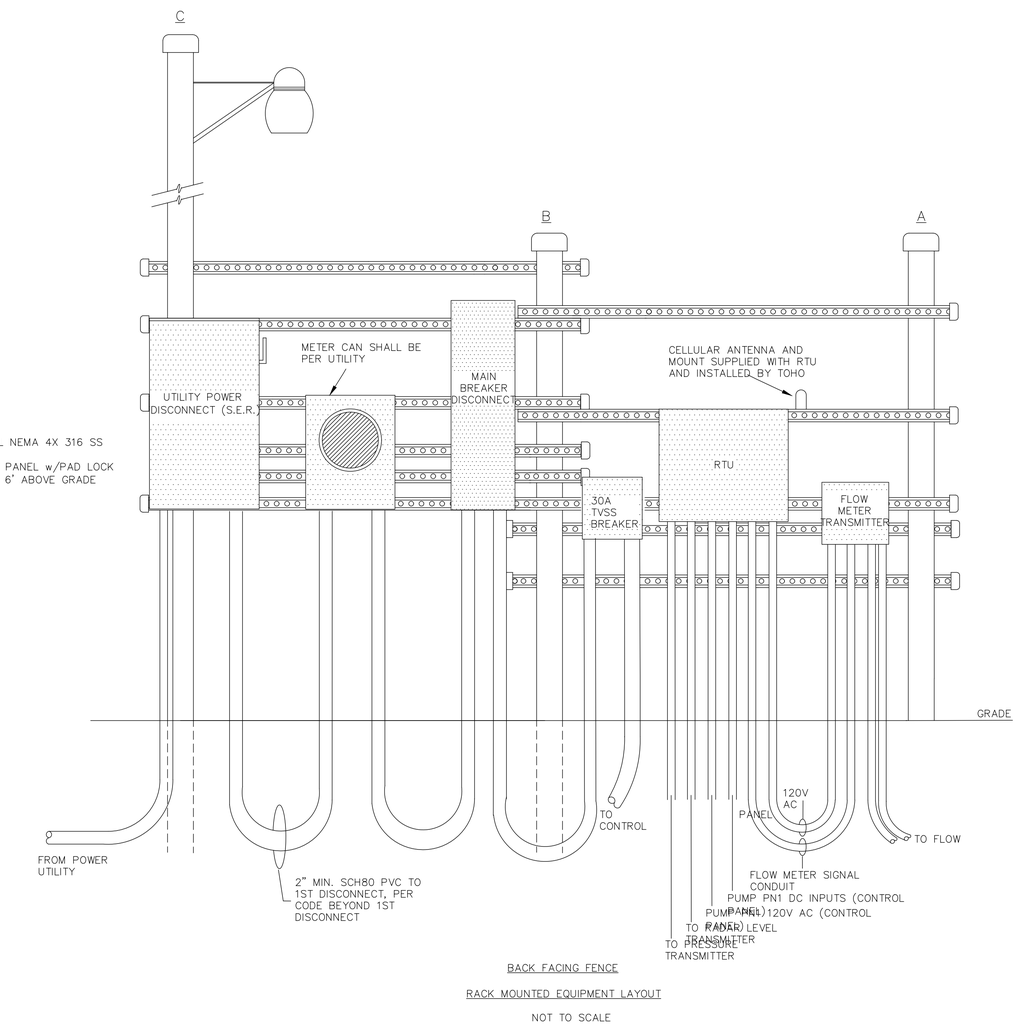
1. 480V POWER SUPPLY SHALL BE UNDERGROUND ON THE LIFT STATION SITE AND SHALL BE 3-PHASE, 4-WIRE (WYE) FROM A 3-PHASE SOURCE ONLY, 100 AMP SERVICE MINIMUM.



FRONT FACING WELL

RACK MOUNTED EQUIPMENT LAYOUT

NOT TO SCALE



BACK FACING FENCE

RACK MOUNTED EQUIPMENT LAYOUT

NOT TO SCALE

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DRAWING NUMBER
31.3

LIFT STATION PANEL RACK

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	07/22/2025
PREVIOUS VERSION:	2022
DRAWN BY:	MP
REVISED BY:	DT

Toho Water Authority

REVISION	DATE
Revised per TVA comments dated Feb. 2025	Mar. 2025

Knight Engineering Services
Planning, Design, Permitting, Inspection
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OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

TOHO WATER AUTHORITY
LIFT STATION DETAILS

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
June 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
NONE

SHEET NUMBER
36

Nonintrinsically safe wiring terminals

TERMINAL STRIP B (TS-B)

1	2	3	4	5	6	7	8	9	10	11	12

FR1

HIGH (N.C)

SPARES

RADAR LEVEL TRANSMITTER
4-20 mA

CONTROL JUNCTION BOX

Nonintrinsically safe wiring terminals

TB1

T1	T2	T3

PUMP 1

TERMINAL STRIP C (TS-C)

1	2	3	4

THER
MALS

MOISTURE 1

PUMP 1 JUNCTION BOX

TB2

T1	T2	T3

PUMP 2

TERMINAL STRIP C (TS-C)

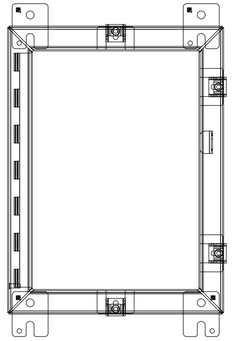
1	2	3	4

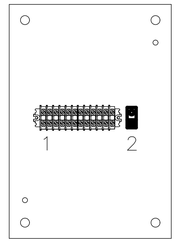
THER
MALS

MOISTURE 1

PUMP 2 JUNCTION BOX

CONTROL JUNCTION BOX



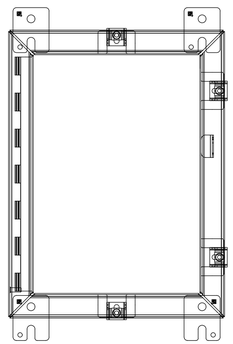


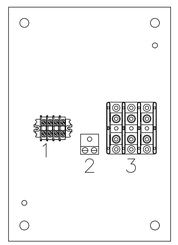
LAYOUT MAY VARY

OUTER DOOR SHOWN – NO DEADFRONT

1 – TS TERMINAL STRIP
2 – GROUND

PUMP 1 & 2 JUNCTION BOXES
(TYPICAL OF 2)





LAYOUT MAY VARY

OUTER DOOR SHOWN – NO DEADFRONT

1 – TS-C TERMINAL STRIP
2 – GROUND
3 – TB1-2 – PUMP TERMINAL BLOCKS 1-2

DRAWING NUMBER
31.4

LIFT STATION JUNCTION BOXES

EFFECTIVE DATE:	04/01/2025
BOARD APPROVED DATE:	01/22/2025
PREVIOUS VERSION:	NA
DRAWN BY:	STA-CON
REVISED BY:	DT

Toho Water Authority

REVISION	DATE
Revised per TWA comments dated Feb. 2025	Mar. 2025

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OLD HICKORY TREE ESTATES

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TOHO WATER AUTHORITY LIFT STATION DETAILS

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
June 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
NONE

SHEET NUMBER
37

THIS PAGE INTENTIONALLY LEFT BLANK PLEASE CONTACT TOHO WATER AUTHORITY FOR CONTROL PANEL DRAWING PACKAGE.

EFFECTIVE DATE:	04/01/2025	LIFT STATION CONTROL PANEL	DRAWING 31.5
BOARD APPROVED DATE:	01/28/2025		
PREVIOUS VERSION:	NA		
DRAWN BY:	DT		
REVISED BY:	DT		

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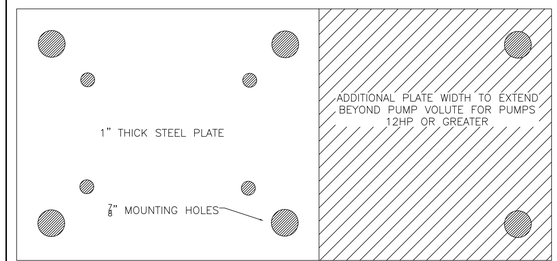
EFFECTIVE DATE:	04/01/2025	LIFT STATION CONTROL PANEL SCHEMATIC	DRAWING 31.6
BOARD APPROVED DATE:	01/28/2025		
PREVIOUS VERSION:	NA		
DRAWN BY:	DT		
REVISED BY:	DT		

THIS PAGE INTENTIONALLY LEFT BLANK PLEASE CONTACT TOHO WATER AUTHORITY FOR RTU SCHEMATIC DRAWING PACKAGE.

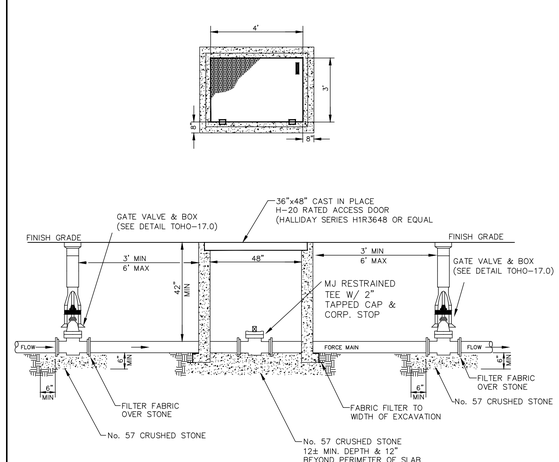
EFFECTIVE DATE:	04/01/2025	LIFT STATION RTU SCHEMATIC	DRAWING 31.7
BOARD APPROVED DATE:	01/28/2025		
PREVIOUS VERSION:	NA		
DRAWN BY:	DT		
REVISED BY:	DT		



NOTES:

1. 3/4" SS MOUNTING BOLTS TO BE SET IN LIFT STATION BASE WITH TOHO APPROVED EPOXY, EXPANDABLE ANCHORS NOT PERMITTED.
   1.1. MINIMUM EMBEDMENT OF ANCHOR SHALL BE PER WETWELL PRECASTER AND PUMP MANUFACTURER REQUIREMENTS.
   1.2. EMBEDMENT SHALL BE MEASURED FROM TOP OF PRECAST SLAB, ADDITIONAL DEPTH SHALL BE REQUIRED THROUGH GROUT USED TO SLOPE WETWELL FLOOR.
2. PUMP BASES SHALL BE MOUNTED WITH STAINLESS STEEL WASHERS AND STAINLESS STEEL NYLON LOCK NUTS.
3. THIS DRAWING IS INTENDED AS A MINIMUM DESIGN STANDARD. MEASUREMENTS MAY BE ADJUSTED DEPENDING ON PUMP BASE SIZE & WEIGHT.
4. ENGINEER OF RECORD IS RESPONSIBLE FOR SUBMITTING A PROJECT SPECIFIC BASE PLATE THAT CONFORMS TO THIS DETAIL AND ACCOMMODATES THE TOHO APPROVED PUMP FOR THE PROJECT.
5. ADDITIONAL REQUIREMENTS NOT OUTLINED IN TOHO DETAILS OR IN TOHO'S STANDARDS AND SPECIFICATIONS SHALL REQUIRE REVIEW AND APPROVAL BY TOHO PRIOR TO INSTALLATION.

EFFECTIVE DATE:	04/01/2025	LIFT STATION PUMP BASE PLATE	DRAWING 32
BOARD APPROVED DATE:	01/28/2025		
PREVIOUS VERSION:	NA		
DRAWN BY:	DT		
REVISED BY:	DT		



NOTES:

1. THIS DETAIL APPLIES TO BOTH ENTRY AND EXIT PORTS.
2. THIS DETAIL DOES NOT APPLY TO LIFT STATION PIG PORT / EMERGENCY BYPASS DISCHARGE PORT.
3. CRUSHED STONE BEDDING 6" MINIMUM BELOW VALVE AND VAULT SHALL BE COVERED WITH FILTER FABRIC.
4. NO PLANTINGS, STRUCTURES, OR OTHER UTILITIES INCLUDING BUT NOT LIMITED TO TELECOM PEDESTALS, ELECTRICAL TRANSFORMERS OR POLES, ETC. SHALL BE INSTALLED WITHIN 36" OF ANY SIDE OF THE GATE VAVLES OR VAULT.

EFFECTIVE DATE:	04/01/2025	PIG PORT	DRAWING 33
BOARD APPROVED DATE:	01/28/2025		
PREVIOUS VERSION:	2022		
DRAWN BY:	MP		
REVISED BY:	DT		

REVISION	DATE
Revised per TVVA comments dated Feb. 2025	Mar. 2025

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

TOHO WATER AUTHORITY LIFT STATION DETAILS

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

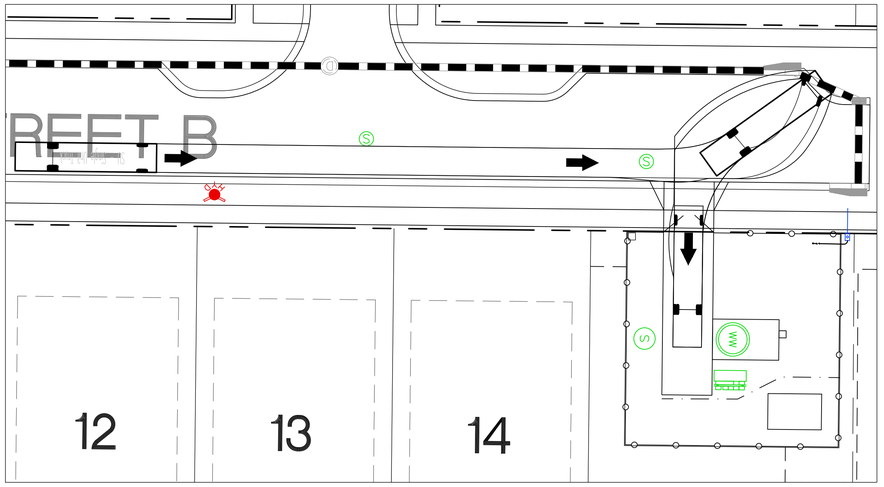
DATE
June 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

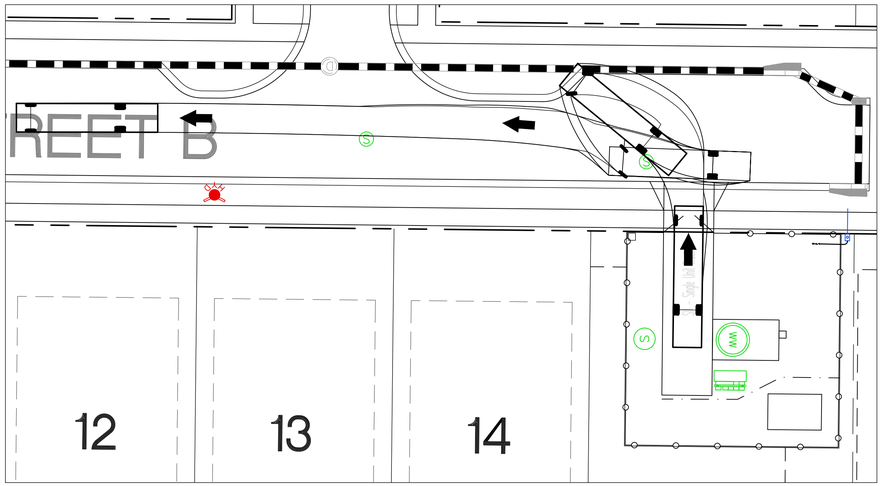
SCALE
NONE

SHEET NUMBER
38



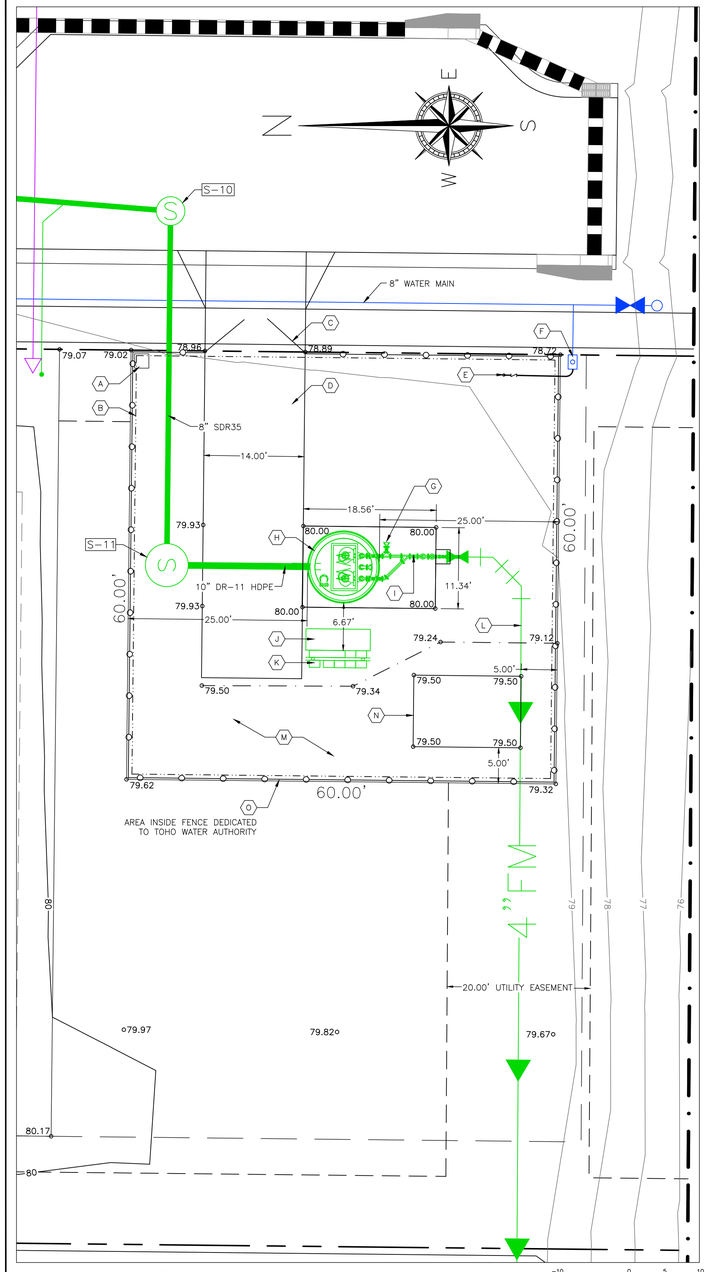
TRACT F – LIFT STATION YARD AUTO-TURN EXHIBIT 1 (ENTRY)

SCALE 1"=20'



TRACT F – LIFT STATION YARD AUTO-TURN EXHIBIT 2 (EXIT)

SCALE 1"=20'



TRACT F – LIFT STATION YARD SITE PLAN

SCALE 1"=10'

(A) GROUND TEST ENCLOSURE

(B) 2/0 TINNED COPPER GROUNDING WIRE LOOP, ±12" INSIDE PROPERTY LINE

(C) CHAIN LINK DOUBLE 8' SWING GATES

(D) CONCRETE DRIVEWAY: 6" CONCRETE (3,500 PSI TYPE 2 CEMENT) REINFORCED w/ 6X6 W2.9/2.9 WELDED WIRE FABRIC TO ASSHTO H-20 TRAFFIC LOADING. STABILIZE BASE TO MIN. 12"

(E) 2" RPZ BACKFLOW PREVENTER AND HOSE BIBB (TYP.)

(F) 2" WATER METER

(G) ALL PUMPOUT DISCHARGE LINES SHALL HAVE A 6" ALUMINUM FEMALE CAM & GROOVE ADAPTER/ASA FLANGE WITH CHAIN-LOCK MALE CAM & GROOVE DUST CAP.

(H) 8' POLYMER CONCRETE WET-WELL

(I) ENDRESS-HAUSER PROMAG 500 FLOW METER

(J) RUBBER MAT TO BE 36" x WIDTH OF THE CONTROL PANEL

(K) CONTROL PANEL/RTU

(L) 4" DR18 PVC SANITARY FORCE MAIN OUT

(M) CRUSHED CONCRETE OR 4" NO.57 BEDDING ROCK, GEOTEXTILE FABRIC UNDER ROCK OR CRUSHED CONCRETE TYP. WITHIN FENCE

(N) 8' x 12' x 6" THICK CONCRETE SLAB FOR BIOREM SK-200 ODOR CONTROL UNIT

(O) 6' HEIGHT CHAIN LINK FENCE W/ 3 STRANDS OF BARBED WIRE 3" INSIDE PROPERTY LINE

REVISION	DATE
Revised per TVVA comments dated Feb. 3, 2025	Mar. 2025

Knight Engineering Services
Planning, Design, Permitting, Inspection
770 Almond Street, Suite B, Clermont, Florida 34711
Phone: (352) 394-8514
Certificate of Authorization No. 00029972

OLD HICKORY TREE ESTATES

SECTION 19, TOWNSHIP 26S, RANGE 31E, OSCEOLA COUNTY, FLORIDA
OWNER/DEVELOPER: VISTA GRANDE PROPERTIES, LLC
225 SOUTH WESTMONTE DR, SUITE 2040, SUNRISE, FL 33326

TOHO WATER AUTHORITY LIFT STATION DETAILS

THOMAS L. KNIGHT LICENSE No. 47614 STATE OF FLORIDA PROFESSIONAL ENGINEER

THOMAS L. KNIGHT, P.E.
FLORIDA REGISTRATION #47614

DATE
June 2025

DRAWN BY
TLK/JMK

PROJECT NUMBER
23-12

SCALE
1" = 50'

SHEET NUMBER
39

LANDSCAPE CALCULATIONS & REQUIREMENTS FOR ST. CLOUD

ZONING & USE

SITE PARCEL ID(s):

19-26-31-4950-0001-0020
19-26-31-4950-0001-0150
19-26-31-4950-0001-0155
19-26-31-4950-0001-0180

△1 FUTURE LAND USE: MEDIUM DENSITY RESIDENTIAL

NOTES:

LANDSCAPE BUFFERS

BUFFERING ADJACENT PROPERTIES (PER P.U.D.)

NORTH BUFFER (±605')
15' WIDE

4 LARGE TREES PER 100 LF	= 25 LARGE TREES REQUIRED = 25 LARGE TREES PROVIDED
2.5 MEDIUM/SMALL TREES PER 100 LF	= 16 MED/SM TREES REQUIRED = 16 MED/SM TREES PROVIDED
23 SHRUBS PER 100 LF	= 140 SHRUBS REQUIRED = 140 SHRUBS PROVIDED

EAST BUFFER (±875')
15' WIDE

4 LARGE TREES PER 100 LF	= 35 LARGE TREES REQUIRED = 35 LARGE TREES PROVIDED
2.5 MEDIUM/SMALL TREES PER 100 LF	= 22 MED/SM TREES REQUIRED = 22 MED/SM TREES PROVIDED
23 SHRUBS PER 100 LF	= 202 SHRUBS REQUIRED = 202 SHRUBS PROVIDED

SOUTH BUFFER (±562')
15' WIDE

4 LARGE TREES PER 100 LF	= 23 LARGE TREES REQUIRED = 23 LARGE TREES PROVIDED
2.5 MEDIUM/SMALL TREES PER 100 LF	= 15 MED/SM TREES REQUIRED = 15 MED/SM TREES PROVIDED
23 SHRUBS PER 100 LF	= 130 SHRUBS REQUIRED = 130 SHRUBS PROVIDED

WEST BUFFER (±837')
15' WIDE

4 LARGE TREES PER 100 LF	= 34 LARGE TREES REQUIRED = 35 LARGE TREES PROVIDED
2.5 MEDIUM/SMALL TREES PER 100 LF	= 21 MED/SM TREES REQUIRED = 21 MED/SM TREES PROVIDED
23 SHRUBS PER 100 LF	= 193 SHRUBS REQUIRED = 194 SHRUBS PROVIDED

NOTES:

MINIMUM CANOPY REQUIREMENTS

NEW DEVELOPMENT (PER SEC. 4.8.10.)

54 LOTS
2 TREES PER LOT = 108 TREES REQUIRED
= 108 TREES PROVIDED

MINIMUM CANOPY REQUIREMENTS

NEW DEVELOPMENT (PER SEC. 4.8.10.)

60 CALIPER INCHES / ACRE

REQUIRED CALIPER INCHES (60 INCHES x 14.4 ACRES)	= 864 CALIPER INCHES REQUIRED
307 TREES PROVIDED @ 3 INCH CAL. EACH	= 921 CAL. INCHES
116 TREES PROVIDED @ 2.5 INCH CAL. EACH	= 290 CAL. INCHES
14 TREES PROVIDED @ 2 INCH CAL. EACH	= 28 CAL. INCHES
	= 1,239 TOTAL CAL/DBH INCHES PROVIDED > 864 CAL. INCHES REQUIRED

GENERAL PLANTING REQUIREMENT

REQUIRED TREE SIZES (PER SEC. 4.8.11.)

MINIMUM 70% OF REQUIRED TREES TO BE LARGE/MEDIUM SIZE

TOTAL REQUIRED TREES	= 437 TREES REQUIRED
LARGE/MEDIUM TREES	= 422 LARGE/MED. TREES PROVIDED
% OF LARGE/MEDIUM TREES	= 97% > MIN. 70%

PLANT SCHEDULE

SYMBOL	CODE	QTY	COMMON / BOTANICAL NAME	SIZE	SPECIFICATION
TREES					
	ARF	43	FLORIDA FLAME RED MAPLE ACER RUBRUM 'FLORIDA FLAME'	65 GAL. / 3" CAL.	10-11` HT. X 2-3` SP.
	CF	18	SCRUB WILD OLIVE CARTREMA FLORIDANA	45 GAL. / 2.5" CAL.	8-10` HT. X 4-5` SP.
	CFL	5	SCRUB HICKORY CARYA FLORIDANA	45 GAL. / 2.5" CAL.	8-10` HT. X 4-5` SP.
	CL	34	SUGAR HACKBERRY CELTIS LAEVIGATA	65 GAL. / 3" CAL.	10-11` HT. X 4-5` SP.
	IV	14	YAUPON HOLLY ILEX VOMITORIA	45 GAL. / 2" CAL.	4-5' HT. X 2-3' SP., STANDARD, FEMALE WITH BERRIES
	NS	15	SOUR GUM NYSSA SYLVATICA	65 GAL. / 3" CAL.	8-10` HT. X 4-5` SP.
	PA	31	CHICKASAW PLUM PRUNUS ANGUSTIFOLIA	45 GAL. / 2.5" CAL.	4-5' HT. X 2-3' SP., TREE FORM, DIOECIOUS, PLANT 1 MALE AND 12 FEMALE
	PO	58	AMERICAN SYCAMORE PLATANUS OCCIDENTALIS	65 GAL. / 3" CAL.	10-11` HT. X 4-5` SP.
	PP	55	LONGLEAF PINE PINUS PALUSTRIS	65 GAL. / 3" CAL.	10-11` HT. X 3-4` SP.
	QI	22	BLUEJACK OAK QUERCUS INCANA	65 GAL. / 3" CAL.	10-11` HT. X 3-4` SP.
	QL	40	TURKEY OAK QUERCUS LAEVIS	45 GAL. / 2.5" CAL.	8-10` HT. X 4-5` SP.
	QVC	23	CATHEDRAL™ LIVE OAK QUERCUS VIRGINIANA 'SDLN'	65 GAL. / 3" CAL.	6-7` HT. X 3-4` SP.
	ST	22	TOUGH BUCKTHORN SIDEROXYLON TENAX	45 GAL. / 2.5" CAL.	6-7` HT. X 3-4` SP.
	UA	19	WINGED ELM ULMUS ALATA	65 GAL. / 3" CAL.	11-12` HT. X 4-5 SP. △1
SHRUBS					
	AO	71	FLAG PAWPAW ASIMINA OBOVATA	3 GALLON	12" HT. X 12" SP.
	CA	194	AMERICAN BEAUTYBERRY CALLICARPA AMERICANA	3 GALLON	24" HT. X 12" SP.
	HPC	49	CALUSA FIRE BUSH HAMELIA PATENS 'CALUSA'	3 GALLON	42" HT. X 36` SP.
	IVC	121	CAROLINA RUBY YAUPON HOLLY ILEX VOMITORIA 'CAROLINA RUBY'	3 GALLON	18" HT. X 12" SP.
	IVS	12	SCHILLINGS DWARF YAUPON HOLLY ILEX VOMITORIA 'SCHILLINGS DWARF'	3 GALLON	12" HT. X 18" SP.
	PN	102	WILD COFFEE PSYCHOTRIA NERVOSA	3 GALLON	18" HT. X 12" SP.
	RH	69	ROUGE PLANT RIVINA HUMILIS	3 GALLON	12" HT. X 12" SP.
	VOR	59	RAULSTON HARDY WALTER'S VIBURNUM VIBURNUM OBOVATUM 'RAULSTON HARDY'	3 GALLON	12" HT. X 18" SP.
	ZI	38	COONTIE ZAMIA INTEGRIFOLIA	3 GALLON	10" HT. X 12" SP.
ORNAMENTAL GRASSES					
	MC	82	PINK MUHLY GRASS MUHLENBERGIA CAPILLARIS	1 GALLON	12" HT. X 12" SP.

NOTES:

1. TREES TO BE INSTALLED AFTER LOTS ARE BUILT.
2. TREES TO BE INSTALLED CLEAR OF UTILITIES.
3. MULCH BELOW ALL TREES AND SHRUBS. TREES WITHIN SOD WILL HAVE 6 FT. DIAMETER MULCH RING.
4. IN AREAS WITHOUT PROPOSED PLANTS, INSTALL BAHIA SOD, PASPALUM NOTATUM 'ARGENTINE'. CONTRACTOR TO VERIFY SOD QUANTITIES.
5. CONTRACTOR TO COORDINATE WITH LANDSCAPE ARCHITECT (321) 338-4781. ALL PLANTS MUST BE LAID OUT IN FIELD AND APPROVED PRIOR TO PLANTING.
6. IF THERE IS A DISCREPANCY BETWEEN PLANTS ON THE PLAN(S) AND PLANTS IN THE PLANT SCHEDULE, THE PLANT SCHEDULE WILL PREVAIL.
7. SELECTIVE PRUNING ONLY FOR PLANT WITH DEAD, DISEASED, OR CROSSING BRANCHES. NEVER SHEAR ANY TREE OR SHRUB.
8. TREES PLANTED NEAR PUBLIC SIDEWALKS AND INFRASTRUCTURE WILL HAVE ROOT BARRIER INSTALLED. SEE DETAIL ON SHEET LP201.

△1

ALL PROPOSED PLANT MATERIAL IS NATIVE

PROPOSED TREES

Tree	Qty	Cal	Size	Total Cal Inches
ACER	43	3	LARGE	129
CARTREMA	18	2.5	MED	45
CARYA	5	2.5	MED	13
CELTIS	43	3	LARGE	129
ILEX	14	2	SMALL	28
NYSSA	15	3	LARGE	45
PLATANUS	58	3	LARGE	174
PINUS	55	3	LARGE	165
PRUNUS	31	2.5	MED	78
QUERCUS	35	3	LARGE	105
QUERCUS	40	2.5	MED	100
QUERCUS	23	3	LARGE	69
SIDEROXYLON	22	2.5	MED	55
ULMUS	35	3	LARGE	105
TOTAL	**437**			**1239**

PROPOSED TREES - GENUS PERCENTAGE

Tree	Qty	Total Qty	Total %
ACER	43	437	9.8%
CARTREMA	18	437	4.1%
CARYA	5	437	1.1%
CELTIS	43	437	9.8%
ILEX	14	437	3.2%
NYSSA	15	437	3.4%
PLATANUS	58	437	13.3%
PINUS	55	437	12.6%
PRUNUS	31	437	7.1%
QUERCUS	35	437	8.0%
QUERCUS	40	437	9.2%
QUERCUS	23	437	5.3%
SIDEROXYLON	22	437	5.0%
ULMUS	35	437	8.0%
TOTAL	**437**		**100.0%**

CLIENT:

VISTA GRANDE PROPERTIES, LLC

3534 MEDITERRA DRIVE
CLERMONT, FL 34711

PROJECT:

OLD HICKORY TREE ESTATES

LOCATION:

OLD HICKORY TREE RD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

SEAL:



This item as been electronically signed and sealed by Karina A. Veaudy, RLA, Registered Landscape Architect # LA6666803, using a Digital Signature on 06-15-2023. Printed copies to this document are not considered signed and sealed and the signature must be verified on any electronic copies.

REVISIONS	DATE
△1 COUNTY COMMENTS	3-28-2025
△2 COUNTY COMMENTS	4-22-2025

DESIGNED BY: KAV
DRAWN BY: ECP
CHECKED BY: KAV
DATE: 05-09-2025

PROJECT NUMBER: 20240913OHE

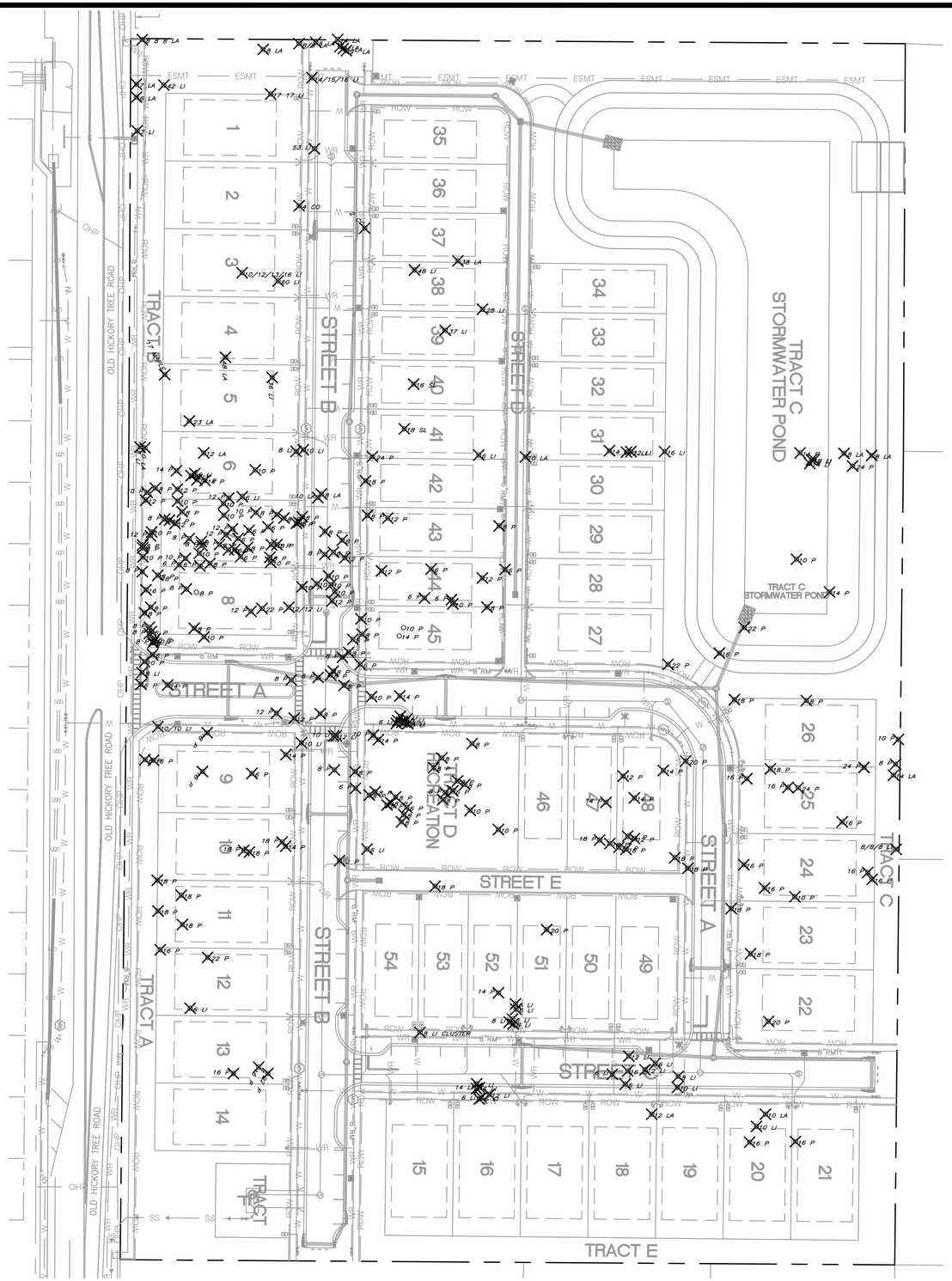
SHEET TITLE:

LANDSCAPE REQUIREMENTS & PLANT SCHEDULE

△2

SHEET NUMBER:

LP001



LEGEND:

EXISTING TREE TO BE REMOVED

Existing Native/Exotic/Invasive Trees

REMAIN

Genus	Quantity	DBH
Coconut Palm	0	0
Laurel Oak	0	0
Live Oak	0	0
Longleaf Pine	0	0
Maple	0	0
Slash Pine	0	0
TOTAL	**0**	**0**

REMOVE

Genus	Quantity	DBH
Coconut Palm	2	6
Laurel Oak	23	282
Live Oak	63	826
Longleaf Pine	198	2,102
Maple	1	17
Slash Pine	2	34
TOTAL	**289**	**3,267**

Know what's **below.** **Call** before you dig. Dial 811 Or Call 800-282-7411

50 0 25 50 100

SCALE: 1" = 50'

NORTH

CLIENT:

VISTA GRANDE PROPERTIES, LLC

3534 MEDITERRA DRIVE
CLERMONT, FL 34711

PROJECT:

OLD HICKORY TREE ESTATES

LOCATION:

OLD HICKORY TREE RD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

SEAL:

REGISTERED LANDSCAPE ARCHITECT KARINA A. VEAUDY STATE OF FLORIDA

This item as been electronically signed and sealed by Karina A. Veaudy, RLA, Registered Landscape Architect # LA6666803, using a Digital Signature on 06-15-2023. Printed copies to this document are not considered signed and sealed and the signature must be verified on any electronic copies.

REVISIONS	DATE

DESIGNED BY: KAV
DRAWN BY: ECP
CHECKED BY: KAV
DATE: 05-09-2025

PROJECT NUMBER: 20240913OHE

SHEET TITLE:

TREE REMOVAL PLAN

SHEET NUMBER:

LP002

LANDSCAPE INSTALLATION NOTES:

1. **SITE CONDITIONS** CONTRACTOR SHALL FAMILIARIZE HIMSELF/HERSELF WITH EXISTING SITE CONDITIONS PRIOR TO BIDDING AND INITIATING PLANTING. ALL EXISTING SITE FURNISHINGS, PAVING, LANDSCAPE, TREES AND OTHER ELEMENTS TO REMAIN SHALL BE PROTECTED FROM ANY DAMAGE. ALL INSTALLATION OF PLANT MATERIAL SHALL COMPLY WITH APPLICABLE JURISDICTIONAL CODES. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS ASSOCIATED WITH THIS WORK. CONTRACTOR TO REPAIR ALL DAMAGE DONE TO PROPERTY DURING DEMOLITION, RELOCATION AND/OR INSTALLATION ACTIVITIES AS THEIR SOLE EXPENSE.

2. **FIELD CONDITIONS** THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND LOCATION OF PROPOSED IMPROVEMENTS PRIOR TO INITIATING ANY CONSTRUCTION. REPORT ANY DISCREPANCIES OR CONFLICTS BETWEEN THE CONSTRUCTION DRAWINGS AND FIELD CONDITIONS TO THE LANDSCAPE ARCHITECT IMMEDIATELY. SEE CIVIL ENGINEERING DRAWINGS FOR GENERAL GRADING OF THE SITE, INCLUDING FINISH GRADES FOR PARKING LOTS, ROADWAYS, SIDEWALKS AND PLANTING AREAS. ALL GRADES, DIMENSIONS AND EXISTING CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR ON-SITE BEFORE CONSTRUCTION AND/OR FABRICATION BEGINS. ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DRAWINGS AND THE FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. MAINTAIN A MINIMUM OF 5 FEET HORIZONTAL SEPARATION BETWEEN ALL TREE AND SHRUB ROOT BALLS FROM ALL TWA MAINTAINED UTILITIES.

3. **UNIT PRICING** THE CONTRACTOR SHALL PROVIDE UNIT PRICES AND INCLUDE THE TOTAL COST OF THE WORK TO INSTALL THE PROJECT INCLUDING BUT NOT LIMITED TO EQUIPMENT, MATERIAL, PRODUCTS, GUARANTEES, LABOR, INSTALLATION, PLANTING SOIL MIX, MULCH, AND SO FORTH TO PROVIDE A COMPLETE JOB AS OUTLINED ON THE DRAWINGS. THE OWNER SHALL HAVE THE OPTION TO ADD OR DEDUCT FROM THE LUMP SUM BID CONTRACT AMOUNT, BASED ON THE QUOTED UNIT PRICES FOR ANY OF THE ITEMS LISTED IN THE "PLANT LIST". IN THE EVENT OF VARIATION BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND THE PLANS, THE PLANS SHALL CONTROL. THE CONTRACTOR SHALL VERIFY ALL QUANTITIES AND REPORT ANY DISCREPANCIES AT THE TIME OF BIDDING. PROVIDE PRODUCT SUBMITTALS TO LANDSCAPE ARCHITECT. IF THERE IS A DISCREPANCY BETWEEN PLANTS ON PLAN(S) AND PLANTS IN THE PLANT SCHEDULE, THE PLANT SCHEDULE SHOULD PREVAIL.

4. **COORDINATION WITH OTHER TRADES** THE WORK SHALL BE COORDINATED WITH OTHER TRADES, INCLUDING IRRIGATION AND ELECTRICAL TO PREVENT CONFLICTS. CARE SHALL BE TAKEN TO AVOID BURIED AND OVERHEAD UTILITIES. CONTRACTOR RESPONSIBLE FOR KNOWING ALL UTILITY LOCATIONS.

5. **UTILITY LOCATIONS** THE CONTRACTOR SHALL REVIEW ARCHITECTURE/ENGINEERING PLANS TO BECOME THOROUGHLY FAMILIAR WITH SURFACE AND SUBSURFACE UTILITIES. LOCATION OF ALL UTILITIES AND BASE INFORMATION IS APPROXIMATE. CONTRACTOR SHALL NOTIFY ALL NECESSARY UTILITY COMPANIES 48 HOURS MINIMUM PRIOR TO DIGGING FOR VERIFICATION OF ALL UNDERGROUND UTILITIES, IRRIGATION AND ALL OTHER OBSTRUCTIONS AND COORDINATE WITH OWNER'S REPRESENTATIVE PRIOR TO INITIATING INSTALLATION. CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR OR REPLACE ANY DAMAGE COMMITTED TO EXISTING ELEMENTS OR UTILITIES ABOVE OR BELOW GROUND TO ITS ORIGINAL CONDITION AND TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.

CONTRACTOR SHALL FIELD ADJUST LOCATION OF PLANT MATERIAL AS NECESSARY TO AVOID DAMAGE TO EXISTING UNDERGROUND UTILITIES AND/OR EXISTING ABOVE GROUND ELEMENTS. ALL CHANGES REQUIRED SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE AND SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE.

MAINTAIN A MINIMUM OF 5 FEET HORIZONTAL SEPARATION BETWEEN ALL TREE AND SHRUB ROOTS AND ALL TWA MAINTAINED UTILITIES.

6. **ROUGH GRADING** THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ROUGH GRADING THE SITE TO WITHIN +/- 0.10 FT. OF GRADES SHOWN ON GRADING PLANS. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR FINISH GRADES IN ALL LANDSCAPE AREAS. CONTRACTOR TO APPROVE ALL GRADED AREAS PRIOR TO PLANTING.

7. **DRAINAGE PERCOLATION TESTING** CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE TO DRAINAGE AS INDICATED ON THE GRADING DRAWINGS. CONTRACTOR SHALL INSURE VERTICAL DRAINAGE AND PERCOLATION OF ALL PLANTING AREAS PRIOR TO INSTALLATION. PERFORM PERCOLATION TESTS IN SEPARATE AREAS OF THE PROJECT SITE. WATER MUST BE ABLE TO PENETRATE AND MOVE THROUGH SOIL; ONE INCH PER HOUR IS CONSIDERED OPTIMAL. IF WATER REMAINS FOR MORE THAN 24 HOURS, IMMEDIATELY NOTIFY THE LANDSCAPE ARCHITECT. PERCOLATION TEST RESULTS SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT. VERTICAL DRILLING THROUGH ANY COMPACTED FILL TO NATIVE SOIL SHALL BE ACCOMPLISHED TO AID DRAINAGE IF NECESSARY. IF INADEQUATE VERTICAL DRAINAGE IS ENCOUNTERED, THE CONTRACTOR SHALL SUBMIT RECOMMENDATIONS FOR PROVIDING ADEQUATE DRAINAGE TO THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT.

8. **SOIL TESTING** THE CONTRACTOR SHALL BEAR ALL COSTS OF SOIL TESTING AND REQUIRED SOIL AMENDMENTS ASSOCIATED WITH THE WORK PRIOR TO COMMENCEMENT OF LANDSCAPE INSTALLATION. THE CONTRACTOR SHALL PROVIDE COMPLETE SOIL TESTS FOR AT LEAST THREE SEPARATE AREAS UNDISTURBED BY PREVIOUS WORK AND TWO AREAS DISTURBED AND/OR REFILLED. CONTACT LANDSCAPE ARCHITECT FOR SOIL TESTING LOCATIONS. CONTRACTOR SHALL ALERT LANDSCAPE ARCHITECT IF ANY UNUSUAL SOILS ARE DISCOVERED ON SITE. IF PH ADJUSTERS ARE NEEDED THE PREFERRED SUBSTANCES FOR ALTERATION ARE: LIME-COMMERCIAL GRADE GROUND OR HYDRATED LIMESTONE CONTAINING NOT LESS THAN 50% OF TOTAL OXIDES; ALUMINUM SULFATE - COMMERCIAL GRADE.

IMPORTED TOPSOIL: THE MANUFACTURERS ANALYSIS AND/OR PRODUCT LITERATURE SHALL BE SUBMITTED TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.

EXISTING TOPSOIL: FOLLOW TESTING PROCEDURES OUTLINES ABOVE TO ENSURE pH REQUIREMENTS, ORGANIC CONTENT AND PRESENCE OF OBJECTIONABLE MATERIAL ARE ALL NOTED.

9. **SOIL PREPARATION** ALL SOILS TO BE TILLED TO A DEPTH OF 12 INCHES MINIMUM. REMOVE STONES MEASURING OVER 1 ½ INCHES IN ANY DIMENSION. REMOVE STICKS, RUBBISH, LIMEROCK AND OTHER EXTRANEOUS MATTER. THE CONTRACTOR SHALL PROVIDE AN APPROVED PLANTING SOIL MIXTURE FOR ALL PLANT MATERIAL. SEE LANDSCAPE INSTALLATION DETAILS FOR SOIL MIXTURE RECIPE.

TOPSOIL SHALL BE NATURAL, FRIABLE, FERTILE, FINE LOAMY SOIL POSSESSING CHARACTERISTICS OF REPRESENTATIVE TOPSOIL IN THE VICINITY THAT PRODUCES HEAVY GROWTH. TOPSOIL SHALL HAVE A ph RANGE OF 5.5 TO 7.4, FREE FROM SUBSOIL, OBJECTIONABLE WEEDS, LITTER, STIFF CLAY, STONES LARGER THAN ONE INCH DIAMETER, STUMPS, ROOTS, TRASH, TOXIC SUBSTANCES OR ANY OTHER DELETERIOUS MATERIAL WHICH MAY BE HARMFUL TO PLANT GROWTH OR HINDER PLANTING OPERATIONS. TOPSOIL SHALL CONTAIN A MINIMUM OF THREE PERCENT ORGANIC MATERIAL.

10. **PARKING AREA EXCAVATION** PARKING AREA LANDSCAPE ISLANDS SHALL BE EXCAVATED OF ALL ROADWAY BASE MATERIAL (MINIMUM DEPTH OF 24 INCHES) AND BACK FILLED WITH APPROVED PLANTING SOIL MIX. SUPER LOAM PLANTING MIX (80% TOPSOIL PLANTING MIX, 20% COMPOST).

11. **BIOCHAR** AND **BIOSOLIDS** ARE BENEFICIAL SOIL ADDITIVES THAT HELP PROMOTE PLANT GROWTH AND ARE RECOMMENDED FOR USE IN THE LANDSCAPE BEDS AT THE TIME OF PLANT INSTALLATION.

A. ORDER ONLINE: WWW.BIOCHARNOW.COM
B. APPLICATION: USE 'SAND SIZE' AT A RATE OF 1 CUBIC FOOT PER 20 SQUARE FEET OF PLANTING AREA.

12. **NO PLANT SUBSITUTIONS ALLOWED** NO PLANT SUBSTITUTIONS WILL BE ACCEPTED WITHOUT WRITTEN APPROVAL BY THE LANDSCAPE ARCHITECT. CONTRACTOR SHALL SUBMIT TO THE LANDSCAPE ARCHITECT PROOF OF NON-AVAILABILITY AND A PROPOSAL FOR EQUIVALENT MATERIAL.

13. **PLANTING**

A. THE PLANT QUANTITIES SHOWN ON THE LANDSCAPE PLANS ARE FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES AND REPORTING ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT FOR CLARIFICATION PRIOR TO CONTRACT AWARD AND COMMENCEMENT OF WORK.

B. PRIOR TO PLANTING INSTALLATION, THE CONTRACTOR SHALL CONFIRM THE AVAILABILITY OF ALL THE SPECIFIED PLANT MATERIALS AND MAKE ARRANGEMENTS WITH THE LANDSCAPE ARCHITECT TO REVIEW PLANT MATERIAL.

C. THE CONTRACTOR IS RESPONSIBLE FOR ERADICATING WEEDS AND GRASS WITHIN THE LIMITS OF THE PLANTING AREAS PRIOR TO BEGINNING LANDSCAPE INSTALLATION. PERENNIAL WEEDS AND GRASSES TO BE REMOVED INCLUDE, BUT ARE NOT LIMITED TO, NUT GRASS, PUNCTURE VINE, MORNING GLORY, TORPEDO GRASS, BERMUDA GRASS, BAHIA GRASS, CRAB GRASS AND OTHER NOXIOUS AND/OR INVASIVE WEEDS. THE SITE IS TO BE MAINTAINED WEED FREE THROUGHOUT PLANTING OPERATIONS. TO PREPARE THE PLANTING AREAS, SPRAY HERBICIDE WITH MANUFACTURER'S RECOMMENDATIONS, WAIT TWO WEEKS, SPRAY A SECOND TIME, WAIT TWO WEEKS, SPRAY A THIRD TIME.

D. UPON ARRIVAL, PLANTS SHALL BE PROTECTED AT THE SITE BY BEING THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. ALL TREES SHALL BE INSTALLED WITHIN 72 HOURS OF DELIVERY.
E. LABEL AT LEAST ONE PLANT OF EACH SPECIES WITH A SECURELY ATTACHED WATERPROOF TAG BEARING THE BOTANICAL NAME.

F. ALL PLANTS THAT DO NOT CONFORM TO SPECIFICATIONS WILL BE REJECTED. ANY PLANTS IN SHOCK (WITH DEAD OR DYING LEAVES), HAVE ROOTS THAT ARE SEVERELY BOUND IN THE CONTAINER OR THAT ARE DEAD WILL BE REJECTED. CONTAINER GROWN PLANTS SHOULD HAVE SUFFICIENT ROOTS TO HOLD THE CONTAINER SOIL TOGETHER AFTER REMOVAL FROM THE CONTAINER.

LANDSCAPE INSTALLATION NOTES CONT'D:

G. IRRIGATION MUST BE INSTALLED BEFORE PLANTS ARE PLANTED. PLANT PLANTS FLUSH WITH FINISHED GRADE SOIL. BACK FILL WITH SOIL IN 12 INCH LAYERS. WATER IN AND COMPACT EACH LAYER TO ELIMINATE AIR VOIDS. IMMEDIATELY APPLY AT LEAST 2 INCHES OF WATER. AFTER PLANTING, REMOVE EXCESS SOIL AND RAKE PLANT BEDS TO A SMOOTH EVEN SURFACE. AT THE PLANTING BED EDGES, TAPER SOIL GRADE DOWN TO A LEVEL BELOW THE TOP OF THE ADJACENT STRUCTURE OR LAWN TO ALLOW FOR A 3 INCH LAYER OF MULCH.

H. ALL SOD PLANTED WITH NO GAPS BETWEEN SOD PIECES, ROLLED AND SEEMS SHALL BE SANDED AFTER INSTALLATION. PEG ALL SOD ON SLOPES GREATER THAN 3:1

I. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY AND PLUMB CONDITION OF ALL TREES AND SHRUBS AND SHALL BE LEGALLY LIABLE FOR ANY DAMAGE CAUSED BY INSTABILITY OF ANY PLANT MATERIALS. STAKING OF TREES OR SHRUBS SHALL BE DONE IN ACCORDANCE WITH PLANS AND SPECIFICATIONS.

J. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION PROTECTION AND SLOPE STABILIZATION BY OWNER-APPROVED METHODS.

K. ALL PLANTS AND PLANTING AREAS SHALL BE TOP DRESSED WITH 3 INCHES OF PINE STRAW MULCH. ALL TREES SHALL HAVE A 3 INCH THICK, 36 INCH RADIUS (FROM THE TRUNK) MULCH RING PLACED AROUND THE BASE OF THE TRUNK. PERENNIALS AND GROUNDCOVER 1 1/2 INCHES MULCH.

L. IRRIGATION TO BE INSTALLED BEFORE PLANTING INSTALLATION BEGINS. CONTRACTOR SHALL COORDINATE ALL PLANTING WORK WITH IRRIGATION WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HAND WATERING AS REQUIRED TO SUPPLEMENT IRRIGATION WATERING AND RAINFALL. CONTRACTOR SHALL BE RESPONSIBLE FOR HAND WATERING IN ALL PLANTING AREAS, REGARDLESS OF THE STATUS OF EXISTING OR PROPOSED IRRIGATION.

M. CONTRACTOR SHALL RE-GRADE ALL AREAS DISTURBED BY PLANT REMOVAL, RELOCATION AND/OR INSTALLATION WORK.

N. ALL TREE AND SHRUB ROOTBALLS SHALL BE A MINIMUM OF 5 FEET HORIZONTAL SEPARATION FROM ANY UTILITY.

O. ALL TREES, SHRUBS, AND GROUNDCOVER SHALL BE PLANTED FLUSH WITH FINISHED GRADE.

14. **TREES**

A. IRRIGATION MUST BE INSTALLED BEFORE TREES ARE PLANTED.

B. PLANT TREES WITH THE ROOTBALL FLUSH WITH THE FINISHED GRADE SOIL. DO NOT PLACE SOIL OR MULCH ON TOP OF THE ROOTBALL. BEFORE PLANTING, EXPOSE THE ROOT FLARE OF EACH TREE. RESTORE GRADE AT BASE OF TRUNK TO ACTUAL ROOT FLARE ELEVATION. DO NOT MOUND MULCH OR SOIL AGAINST ROOT FLARE OF TRUNK; REMOVE WIRE BASKET AND BURLAP ON ALL SIDES OF ROOTBALL TO EXPOSE ROOTS TO SOIL.

C. ALL TREES WITHIN SOD AREAS AND GROUNDCOVER AREAS TO RECEIVE A 4 FOOT RADIUS (FROM THE TRUNK) AREA OF PINE STRAW MULCH. DO NOT MOUND MULCH AGAINST ROOT FLARE OR TRUNKS OF TREES OR SHRUBS.

D. TREES WITH GIRDLING ROOTS, BROKEN ROOTBALLS, WOUNDS, BARK INJURIES ON THE MAJOR TRUNKS, TIP DIE BACK OR IN SHOCK (WITH DEAD OR DYING LEAVES) WILL BE REJECTED.

E. IF TREES ARE DELIVERED IN METAL BASKETS, REMOVE THE TOP 2/3 OF THE METAL BASKETS AND BURLAP JUST PRIOR TO PLANTING. IF TREES ARE BURIED IN THE FULL METAL BASKETS, A FINE OF $2,000 PER TREE WILL BE IMPOSED BY THE OWNER.

F. BALLED AND BURLAP TREES SHOULD BE DUG AND PREPARED FOR SHIPMENT IN A MANNER THAT WILL NOT DAMAGE ROOTS, BRANCHES, SHAPE AND FUTURE DEVELOPMENT AFTER PLANTING. IN AS MUCH AS POSSIBLE, CONTRACTOR TO ENSURE THAT TREES SHOULD BE ROOT PRUNED A MINIMUM OF 30 DAYS PRIOR TO DIGGING AND HARDENED OFF AT THE NURSERY FOR A MINIMUM OF 30 DAYS PRIOR TO SHIPPING. IN ADDITIONAL TO ROOTBALL IRRIGATION, THE NURSERY SHOULD PROVIDE OVERHEAD MIST IRRIGATION FOR THE DURATION OF THIS PERIOD. THE PRODUCT RECEIVED ON SITE SHOULD HAVE A FIRM BALL WITH NATURAL SOILS. DRIED, CRACKED OR BROKEN ROOTBALLS WILL BE REJECTED. ROOTBALLS SHOULD BE SIZED AT A MINIMUM DIAMETER RATIO OF 12 INCHES OF ROOTBALL FOR EACH 1 INCH OF TREE CALIPER. ALL FIELD GROWN TREES MUST BE FROM A 'ROOTS PLUS' GROWERS NURSERY.

G. AFTER EXCAVATION OF TREE PLANTING PIT, PLACE TREE IN PIT AND BACK FILL WITH SOIL IN 12 INCH LAYERS. WATER IN AND COMPACT EACH LAYER TO ELIMINATE AIR VOIDS. IMMEDIATELY APPLY AT LEAST 8 INCHES OF WATER. AFTER PLANTING, REMOVE EXCESS SOIL AND RAKE PLANT BEDS TO A SMOOTH EVEN SURFACE. RAKE SMOOTH AND THEN CREATE A 4 INCH HEIGHT SOIL SAUCER APPROXIMATELY 3 FEET RADIAL TO THE TRUNK.

H. PALM HEIGHTS ARE INDICATED AT THE PALM LOCATIONS ON THE PLANS. REFER TO CLEAR TRUNK (CT) SPECIFICATIONS ON THE PLANT SCHEDULE.

15. **INSPECTIONS**

A. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT A MINIMUM OF 7 DAYS IN ADVANCE OF THE PLANT MATERIAL DELIVERY TO THE SITE. THE LANDSCAPE ARCHITECT SHALL INSPECT THE PLANT MATERIAL **BEFORE** THE PLANTS AND TREES HAVE BEEN UNLOADED.

B. THE LANDSCAPE ARCHITECT SHALL HAVE THE RIGHT, AT ANY STAGE OF THE OPERATIONS, TO REJECT ANY AND ALL WORK AND/OR MATERIALS WHICH, IN HER OPINION, DO NOT MEET WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS.

C. TREE CALIPER SIZES NOTED ARE MINIMUM. ALL CONTAINER SIZES NOTED ARE MINIMUM; INCREASE SIZE, IF NECESSARY, TO PROVIDE PLANT HEIGHT AND SPREAD PER SPECIFICATIONS.

D. ALL INSTALLATION OF PLANT MATERIAL SHALL COMPLY WITH APPLICABLE JURISDICTIONAL CODES. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS ASSOCIATED WITH THIS WORK.

E. PRIOR TO PLANTING INSTALLATION, THE CONTRACTOR SHALL CONFIRM THE AVAILABILITY OF ALL THE SPECIFIED PLANT MATERIALS. SUBMIT DATED PHOTOGRAPHS OF TREE MATERIAL, PLANT MATERIAL AND SPECIMENS TO THE LANDSCAPE ARCHITECT FOR REVIEW. IF PLANT MATERIAL DOES NOT COMPLY WITH THE REQUIREMENTS AS SPECIFIED HEREIN, THE LANDSCAPE ARCHITECT AND OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT SUCH PLANTS AND REQUIRE THE CONTRACTOR TO REPLACE REJECTED MATERIALS OR WORK AND CONTINUE SPECIFIED MAINTENANCE UNTIL RE-INSPECTED AND FOUND TO BE ACCEPTABLE.

16. **PRE-INSTALLATION PLANT LAYOUT INSPECTION** CONTRACTOR SHALL LAYOUT ALL PLANT MATERIAL PRIOR TO INITIATING INSTALLATION FOR THE REVIEW AND APPROVAL OF THE LANDSCAPE ARCHITECT. THE LOCATION OF ALL PLANT MATERIAL IS SUBJECT TO FIELD CHANGE. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT A MINIMUM OF 5 WORKING DAYS TO SCHEDULE INPSECTION OF PLANT MATERIAL LAYOUT PRIOR TO PLANTING.

THE LOCATION OF PLANTS, AS SHOWN IN THESE PLANS, ARE APPROXIMATE. THE FINAL LOCATIONS MAY BE ADJUSTED TO ACCOMMODATE UNFORESEEN FIELD CONDITIONS, TO COMPLY WITH SAFETY CRITERIA, TO AVOID CREATING UNSAFE CONDITIONS, OR AS OTHERWISE DIRECTED BY THE LANDSCAPE ARCHITECT. ALL ADJUSTMENTS SHALL BE VERIFIED AND APPROVED BY THE LANDSCAPE ARCHITECT.

17. **TREE SAVE AREAS** ALL TREE SAVE AREAS SHALL BE COVERED WITH 3" OF PINE STRAW MULCH. IN AREAS WITH EXISTING PLANTS, CONTRACTOR SHALL EXERCISE CAUTION IN PLACING OF MULCH TO PROTECT PLANTS. DO NOT STORE OR USE MATERIALS OR EQUIPMENT WITHIN THE DRIPLINE OF ANY TREE TO BE RETAINED UNLESS THE ACTIVITY IS BEING DONE TO PROTECT TREES. CLEARING OF VEGETATION WITHIN THE DRIPLINE OF TREES DESIGNATED FOR PRESERVATION SHALL ONLY BE BY HAND OR LIGHT RUBBER WHEELED EQUIPMENT THAT WILL NOT DAMAGE TREE ROOTS. SEE TREE PROTECTION BARRICADE PLAN. A $1,000 PENALTY WILL BE APPLIED IF THESE GUIDELINES ARE NOT FOLLOWED.

18. **EXISTING VEGETATION TO REMAIN** ALL EXISTING VEGETATION TO REMAIN SHALL BE PROTECTED. ANY PLANT/TREE DAMAGED, SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. SEE TREE PROTECTION PLANS FOR DETAILS.

19. **STAKING** CONTRACTOR SHALL INSURE THAT ALL TREES ARE MAINTAINED STRAIGHT AND PLUMB. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PREVENT PLANTS AND TREES FROM FALLING OR BEING BLOWN OVER, TO RE-STRAIGHTEN AND REPLANT ALL PLANTS WHICH LEAN OR FALL AND TO REPLACE ALL PLANTS WHICH ARE DAMAGED DUE TO LACK OF GUYING OR STAKING. PLANTS BLOWN OVER BY HIGH WINDS UNDER 39 MPH SHALL NOT BE CAUSE FOR ADDITIONAL EXPENSE TO THE OWNER, BUT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. DAMAGED PLANTS SHALL BE BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. PLANTS BLOWN OVER BY HIGH WINDS DUE TO A TROPICAL STORM (39-73 MPH) OR A HURRICANE (74 MPH AND HIGHER) PER THE NATIONAL WEATHER SERVICE, THE CONTRACTOR SHALL NOT BE RESPONSIBLE AND THE OWNER SHALL PAY THE CONTRACTOR TO RE-GUY THE PLANTS.

20. **WATERING** IRRIGATION TO BE IN PLACE BEFORE LANDSCAPE INSTALLATION COMMENCES. ALL PLANTS SHALL BE THOROUGHLY WATERED AT TIME OF PLANTING AND KEPT ADEQUATELY WATERED UNTIL TIME OF FINAL INSPECTION ACCEPTANCE. BEGIN WATER ESTABLISHMENT PERIOD IMMEDIATELY. PROVIDE SUFFICIENT QUANTITY OF WATER TO SATURATE THE SOIL 18 INCHES DEEP AND THROUGHOUT THE PLANTING BACKFILL AREA DURING THE CONTRACT MAINTENANCE PERIOD. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HAND WATERING AS REQUIRED UNTIL PLANT MATERIALS ARE WELL ESTABLISHED, TO SUPPLEMENT IRRIGATION WATERING AND RAINFALL, AND SHALL BE RESPONSIBLE FOR HAND WATERING IN ALL LANDSCAPE AREAS WHERE THE EXISTING OR PROPOSED IRRIGATION IS FOR WHATEVER REASON NOT OPERATING OR NOT OPERATING CORRECTLY.

21. **CLEAN SITE** CONTRACTOR SHALL CLEAN THE WORK AREAS AT THE END OF EACH WORKING DAY. RUBBISH AND DEBRIS SHALL BE COLLECTED AND DESPOSED OF DAILY. ALL MATERIALS, PRODUCTS, AND EQUIPMENT SHALL BE STORED IN AN ORGANIZED FASHION AS DIRECTED BY THE OWNER'S REPRESENTATIVE.

LANDSCAPE INSTALLATION NOTES CONT'D:

22. **VEHICLE PARKING AND HOLDING AREA** CONTRACTOR AND EMPLOYEE VEHICLE PARKING AND LANDSCAPE HOLDING AREAS SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE.

23. **CONSTRUCTION ACCESS, SCHEDULING AND COORDINATION** CONSTRUCTION ACCESS SHALL BE INDICATED BY THE OWNER'S REPRESENTATIVE. COORDINATION OF HEAVY EQUIPMENT AND MATERIALS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING AND COORDINATION OF WORK WITH OTHER TRADES AND THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL COORDINATE ACCESS AND STAGING AREAS WITH THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL TAKE WHATEVER MEANS THAT MAY BE NECESSARY TO FULLY UNDERSTAND ALL THE ACCESS ROUTES AND CONSTRUCTION SCHEDULES IN ORDER TO PROVIDE A COMPLETE AND FINISHED PROJECT ON SCHEDULE. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING EROSION AND SEDIMENTATION CONTROL MEASURES DURING CONSTRUCTION. PROVIDE ADDITIONAL MEASURES AS NECESSARY TO MINIMIZE ADVERSE IMPACTS IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES.

24. **SAFETY** THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SAFETY MEASURES DURING CONSTRUCTION OPERATIONS TO PROTECT THE PUBLIC ACCORDING TO ALL APPLICABLE CODES AND PROFESSIONAL AND LOCAL PRACTICES.

LANDSCAPE MAINTENANCE NOTES:

1. **MAINTENANCE PRIOR TO INITIAL ACCEPTANCE**

A. BEGIN MAINTENANCE IMMEDIATELY AFTER PLANTING AND CONTINUE UNTIL FINAL ACCEPTANCE. MAINTENANCE SHALL BEGIN AFTER EACH PLANT HAS BEEN INSTALLED AND SHALL CONTINUE UNTIL THE DATE OF FINAL COMPLETION WHEN THE 365 DAY PLANT WARRANTY PERIOD BEGINS.

B. PLANT MAINTENANCE SHALL INCLUDE WATERING, WEEDING, CULTIVATING, MULCHING, TIGHTENING AND REPAIRING OF GUYS, REPLACEMENT OF SICK OR DEAD PLANTS, RESETTING PLANTS, RESETTING PLANTS TO PROPER GRADES OR UPRIGHT POSITION, RESTORATION OF THE PLANTING SAUCER, AND ALL OTHER CARE NEEDED FOR PROPER GROWTH AND HEALTH OF THE PLANT MATERIAL.

2. INITIAL ACCEPTANCE / MAINTENANCE WARRANTY CONTRACT COMMENCEMENT

A. UPON COMPLETION OF ALL LANDSCAPING, AN INSPECTION FOR SUBSTANTIAL COMPLETION OF THE WORK SHALL BE HELD. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT FOR SCHEDULING OF THE INSPECTION AT LEAST SEVEN (7) DAYS PRIOR TO THE ANTICIPATED INSPECTION DATE. A PUNCH LIST WILL BE COMPLETED, IF APPLICABLE. WHEN THE PUNCH LIST HAS BEEN COMPLETED, A FINAL INSPECTION SHALL BE SCHEDULED. THE CONTRACTOR WILL NOTIFY THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT AT LEAST SEVEN (7) DAYS PRIOR TO THE FINAL ACCEPTANCE INSPECTION DATE.

B. **WARRANTY** CONTRACTOR TO SUBMIT A WRITTEN WARRANTY WILL COMMENCE ON THE DATE OF FINAL ACCEPTANCE THAT ALL PLANTS WILL REMAIN IN A "HEALTHY, VIGOROUS CONDITION" AND MEET SPECIFICATIONS FROM THE DATE OF INITIAL ACCEPTANCE AND UNTIL FINAL ACCEPTANCE (AFTER 365 DAYS). A WRITTEN NOTICE WILL BE GIVEN BY THE LANDSCAPE ARCHITECT TO THE CONTRACTOR STATING THE DATE WHEN THE 365 DAY MAINTENANCE AND GUARANTEE PERIOD BEGIN.

C. IF PLANTS ARE DIRECTED TO BE REPLACED, REPLACEMENT SHALL TAKE PLACE WITHIN 14 DAYS OF RECEIPT OF WRITTEN REPORT.

D. IF THE INSTALLATION CONTRACTOR WILL NOT BE PERFORMING THE MAINTENANCE DURING THE MAINTENANCE PERIOD, THE INSTALLATION CONTRACTOR WILL BE REQUIRED TO PERFORM MONTHLY INSPECTIONS AND DIRECT THE PROPER MAINTENANCE TECHNIQUES AND DIRECT ANY DEAD PLANT MATERIAL BE REPLACED. IF THERE IS A DISCREPANCY AT THE END OF THE MAINTENANCE PERIOD, THE INSTALLATION CONTRACTOR WILL BE RESPONSIBLE FOR ALL PROPER MAINTENANCE AND REPLACEMENT OF DEAD PLANT MATERIAL AT NO COST TO THE OWNER.

3. FINAL INSPECTION AND ACCEPTANCE/ END OF MAINTENANCE CONTRACT

A. WHEN 365 DAY MAINTENANCE WORK IS COMPLETE (PLANT MATERIAL GUARANTEE PERIOD), THE CONTRACTOR SHALL SUBMIT WRITTEN NOTIFICATION TO THE LANDSCAPE ARCHITECT. THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT WILL CONDUCT A FINAL ACCEPTANCE INSPECTION.WITHIN 14 DAYS OF WRITTEN NOTIFICATION.

B. PLANTS SHALL BE ACCEPTABLE IF THEY ARE IN A HEALTHY AND VIGOROUS CONDITION AND ARE IN COMPLIANCE WITH THE SPECIFICATIONS FOR EACH PLANT AS DETERMINED BY THE LANDSCAPE ARCHITECT. REPLACE REJECTED WORK/PLANTS WITHIN 14 DAYS OF NOTIFICATION. CONTINUE LANDSCAPE MAINTENANCE UNTIL WORK IS RE-INSPECTED AND FOUND ACCEPTABLE. PLANT REPLACEMENTS SHALL BE GUARANTEED FOR AN ADDITIONAL 30 DAYS. UPON SATISFACTORY COMPLETION, THE LANDSCAPE ARCHITECT WILL PROVIDE A WRITTEN FINAL ACCEPTANCE OF THE PLANT MATERIAL.

CLIENT:

VISTA GRANDE PROPERTIES, LLC

3534 MEDITERRA DRIVE
CLERMONT, FL 34711

PROJECT:

OLD HICKORY TREE ESTATES

LOCATION:

OLD HICKORY TREE RD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

SEAL:

REGISTERED LANDSCAPE ARCHITECT KARINA A. VEAUDRY # LA6666803 STATE OF FLORIDA

This item as been electronically signed and sealed by Karina A. Veaudry, RLA, Registered Landscape Architect # LA6666803, using a Digital Signature on 06-15-2023. Printed copies to this document are not considered signed and sealed and the signature must be verified on any electronic copies.

REVISIONS	DATE

DESIGNED BY: KAV
DRAWN BY: ECP
CHECKED BY: KAV
DATE: 05-09-2025

PROJECT NUMBER: 20240913OHE

SHEET TITLE:

LANDSCAPE NOTES

SHEET NUMBER:

LP003

Know what's **below.**
Call before you dig.
Dial 811
Or Call 800-282-7411

NORTH BUFFER
15' WIDE
(4 LRG TREE/100 LF)
(2.5 MED/SM TREE/100 LF)
(23 SHRUB/100 LF)
PER P.U.D.

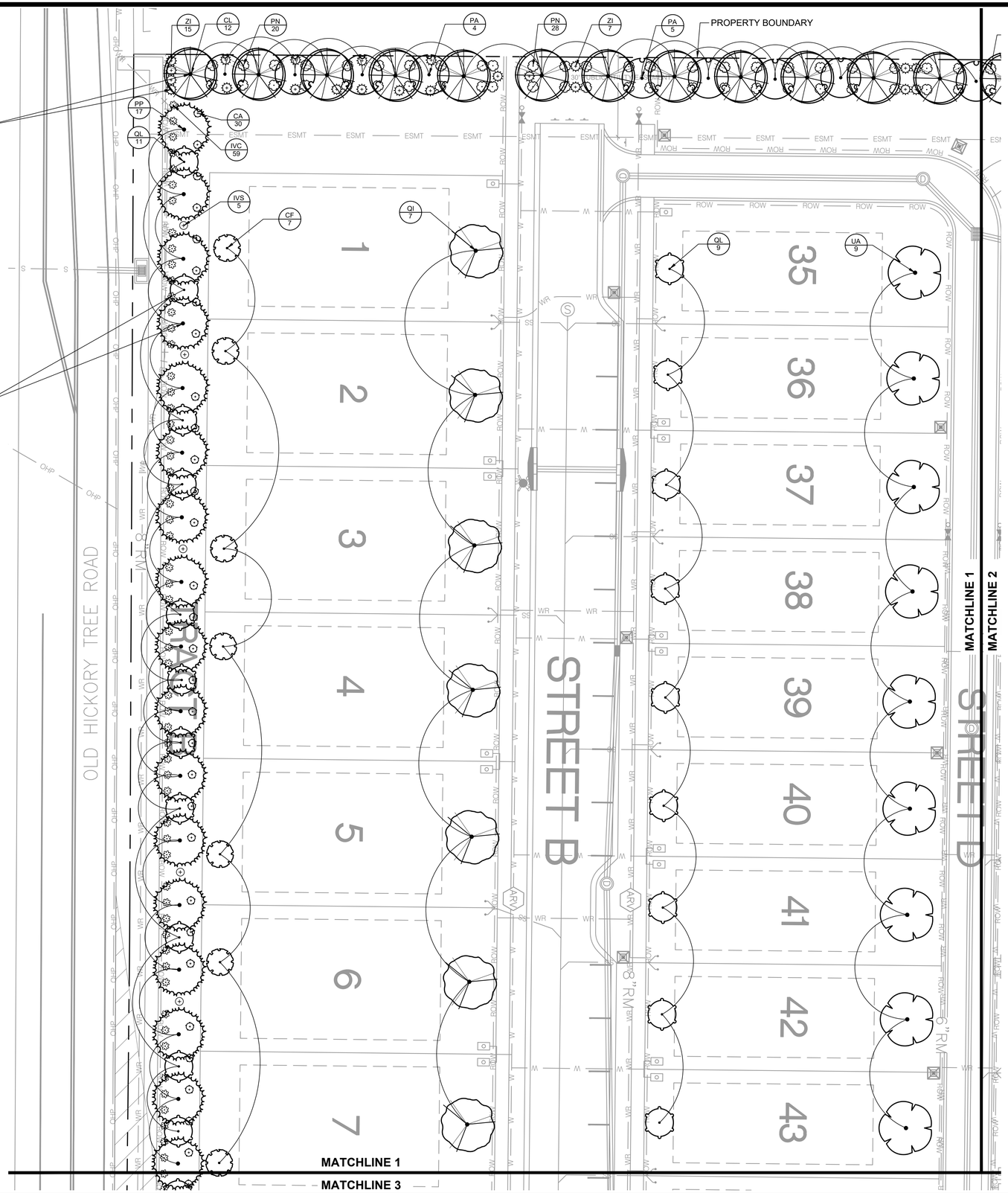
NOTE:

REFER TO SHEET LP001 LANDSCAPE REQUIREMENTS AND PLANT SCHEDULE.

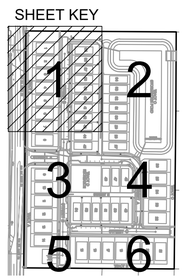
WEST BUFFER
15' WIDE
(4 LRG TREE/100 LF)
(2.5 MED/SM TREE/100 LF)
(23 SHRUB/100 LF)
PER P.U.D.

NOTE:

REFER TO SHEET LP001 LANDSCAPE REQUIREMENTS AND PLANT SCHEDULE.



SHEET KEY



20 0 10 20 40
SCALE: 1" = 20'

NORTH

CLIENT:

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3534 MEDITERRA DRIVE
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PROJECT:

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Orlando, FL 32853-6433
(321) 388-4781

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REVISIONS	DATE
2 COUNTY COMMENTS	4-22-2025

DESIGNED BY: KAV
DRAWN BY: ECP
CHECKED BY: KAV
DATE: 05-09-2025

PROJECT NUMBER: 20240913OHE

SHEET TITLE:

LANDSCAPE PLAN

SHEET NUMBER:

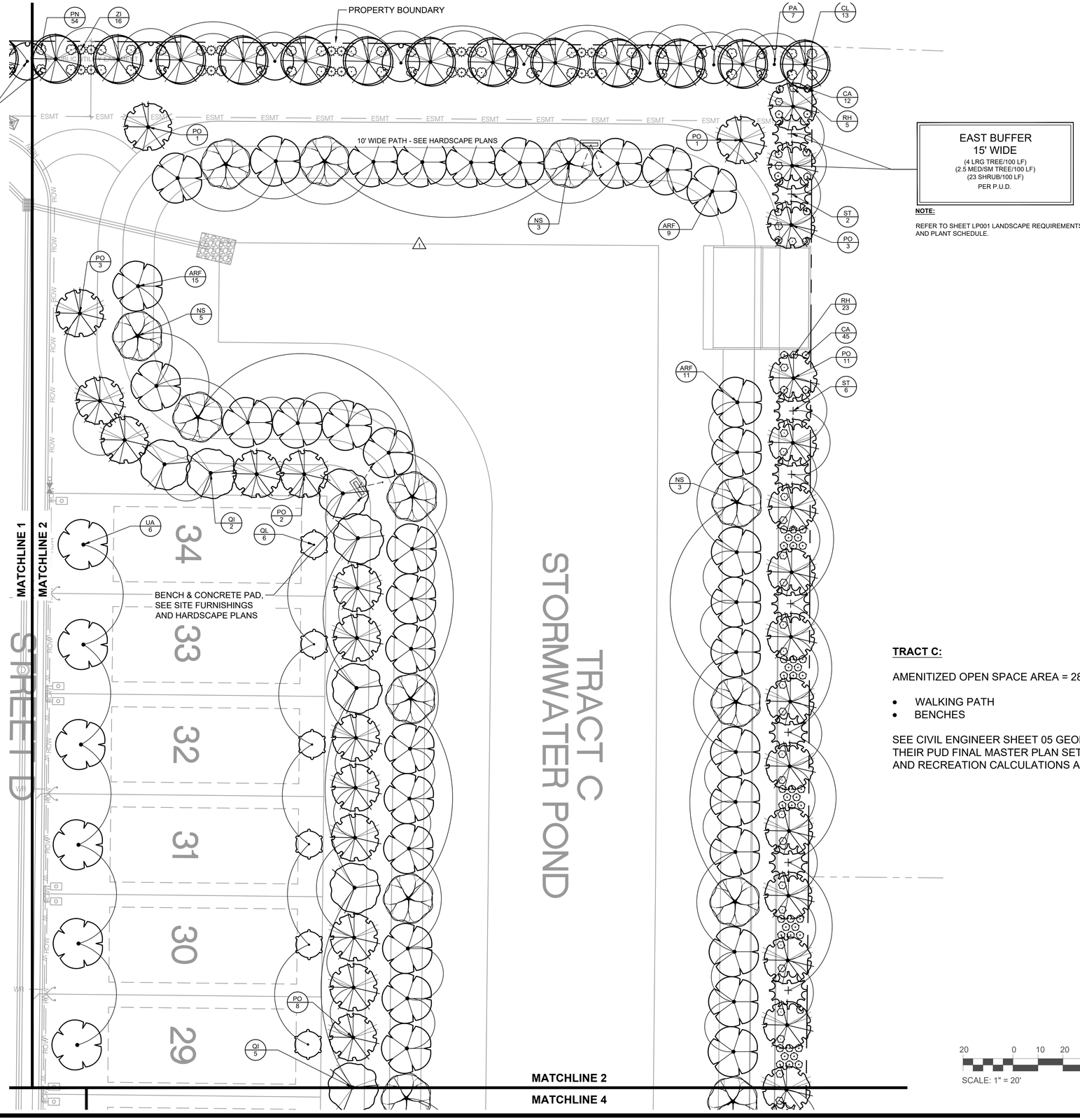
LP101

Know what's **below.**
Call before you dig.
Dial 811
Or Call 800-282-7411

NORTH BUFFER
15' WIDE
(4 LRG TREE/100 LF)
(2.5 MED/SM TREE/100 LF)
(23 SHRUB/100 LF)
PER P.U.D.

NOTE:

REFER TO SHEET LP001 LANDSCAPE REQUIREMENTS AND PLANT SCHEDULE.



EAST BUFFER
15' WIDE
(4 LRG TREE/100 LF)
(2.5 MED/SM TREE/100 LF)
(23 SHRUB/100 LF)
PER P.U.D.

NOTE:

REFER TO SHEET LP001 LANDSCAPE REQUIREMENTS AND PLANT SCHEDULE.

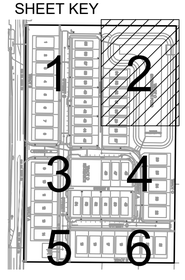
TRACT C:

AMENITIZED OPEN SPACE AREA = 28,781 SF (.66 ACRES)

- WALKING PATH
- BENCHES

SEE CIVIL ENGINEER SHEET 05 GEOMETRY PLAN FROM THEIR PUD FINAL MASTER PLAN SET FOR OPEN SPACE AND RECREATION CALCULATIONS AND ACREAGES

SHEET KEY



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SCALE: 1" = 20'

NORTH

CLIENT:

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PROJECT:

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CONSULTANT:

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611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

SEAL:



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REVISIONS	DATE
1 COUNTY COMMENTS	3-28-2025
2 COUNTY COMMENTS	4-22-2025

DESIGNED BY: KAV
DRAWN BY: ECP
CHECKED BY: KAV
DATE: 05-09-2025

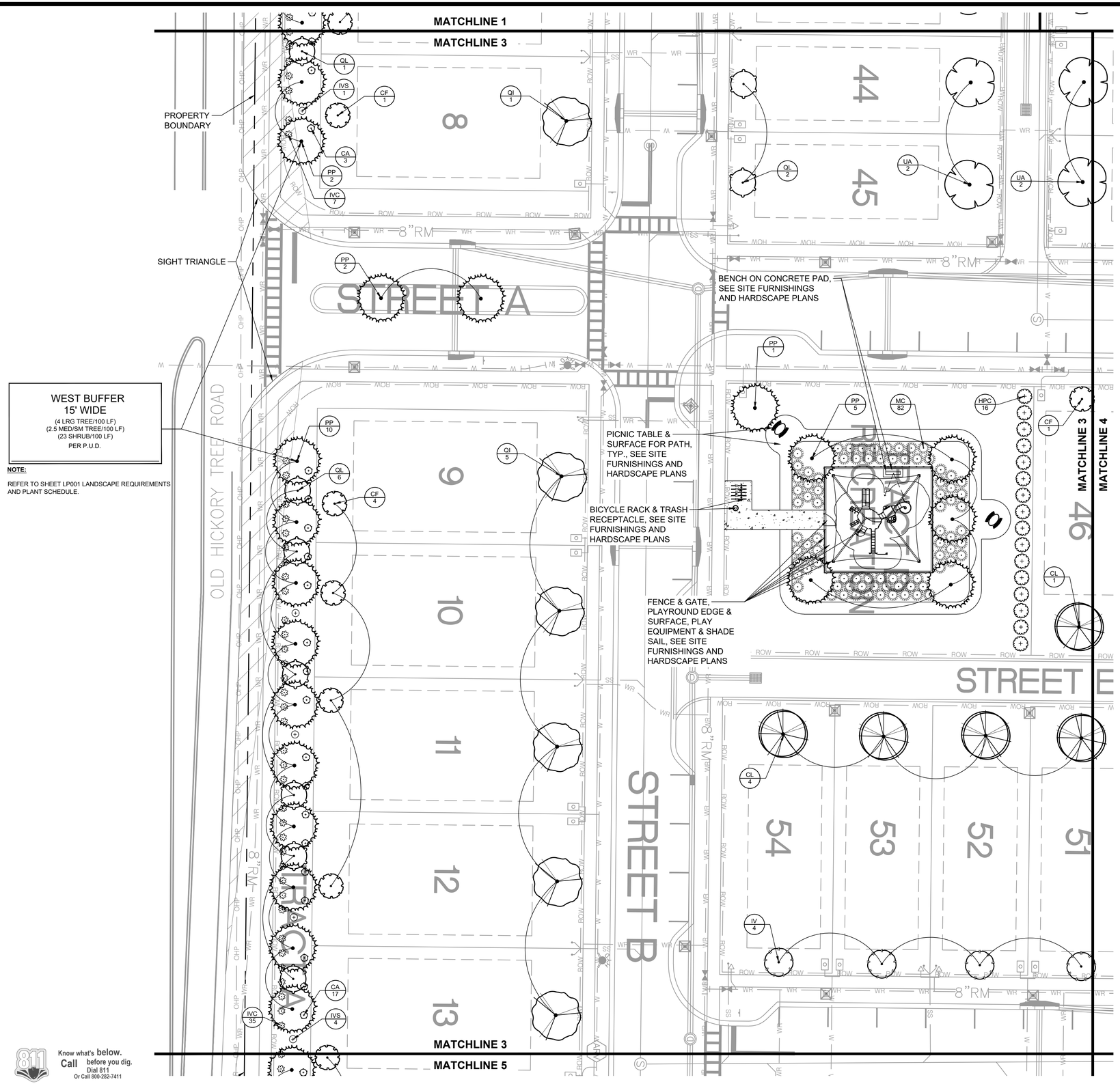
PROJECT NUMBER: 20240913OHE

SHEET TITLE:

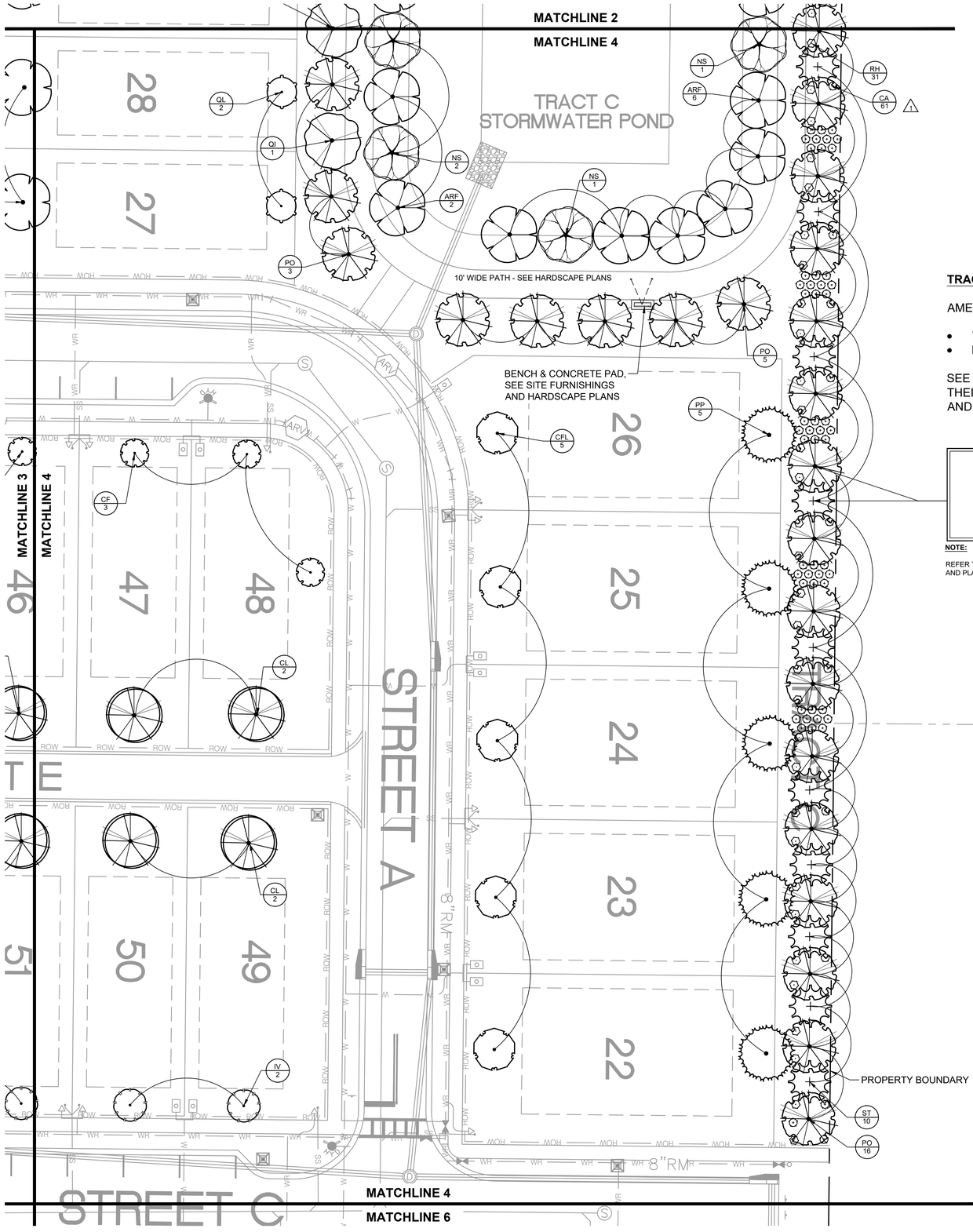
LANDSCAPE PLAN

SHEET NUMBER:

LP102


MATCHLINE 1
MATCHLINE 3
PROPERTY BOUNDARY
SIGHT TRIANGLE
WEST BUFFER
15' WIDE
(4 LRG TREE/100 LF)
(2.5 MED/SM TREE/100 LF)
(23 SHRUB/100 LF)
PER P.U.D.
NOTE:
REFER TO SHEET LP001 LANDSCAPE REQUIREMENTS AND PLANT SCHEDULE.
OLD HICKORY TREE ROAD
STREET A
STREET B
STREET E
BENCH ON CONCRETE PAD, SEE SITE FURNISHINGS AND HARDSCAPE PLANS
PICNIC TABLE & SURFACE FOR PATH, TYP., SEE SITE FURNISHINGS AND HARDSCAPE PLANS
BICYCLE RACK & TRASH RECEPTACLE, SEE SITE FURNISHINGS AND HARDSCAPE PLANS
FENCE & GATE, PLAYROUND EDGE & SURFACE, PLAY EQUIPMENT & SHADE SAIL, SEE SITE FURNISHINGS AND HARDSCAPE PLANS
MATCHLINE 3
MATCHLINE 4
MATCHLINE 5
8"RM
8"RM
8"RM

Know what's **below.**
Call before you dig.
Dial 811
Or Call 800-282-7411



TRACT C:

AMENITIZED OPEN SPACE AREA = 28,781 SF (.66 ACRES)

- WALKING PATH
- BENCHES

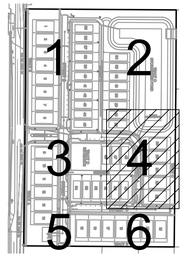
SEE CIVIL ENGINEER SHEET 05 GEOMETRY PLAN FROM THEIR PUD FINAL MASTER PLAN SET FOR OPEN SPACE AND RECREATION CALCULATIONS AND ACREAGES

EAST BUFFER
15' WIDE
(4 LRG TREE/100 LF)
(2.5 MED/SM TREE/100 LF)
(23 SHRUB/100 LF)
PER P.U.D.

NOTE:

REFER TO SHEET LP001 LANDSCAPE REQUIREMENTS AND PLANT SCHEDULE.

SHEET KEY



SCALE: 1" = 20'

NORTH

CLIENT:

VISTA GRANDE PROPERTIES, LLC

3534 MEDITERRA DRIVE
CLERMONT, FL 34711

PROJECT:

OLD HICKORY TREE ESTATES

LOCATION:

OLD HICKORY TREE RD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

SEAL:



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REVISIONS	DATE
1 COUNTY COMMENTS	3-28-2025
2 COUNTY COMMENTS	4-22-2025

DESIGNED BY: KAV
DRAWN BY: ECP
CHECKED BY: KAV
DATE: 05-09-2025

PROJECT NUMBER: 20240913OHE

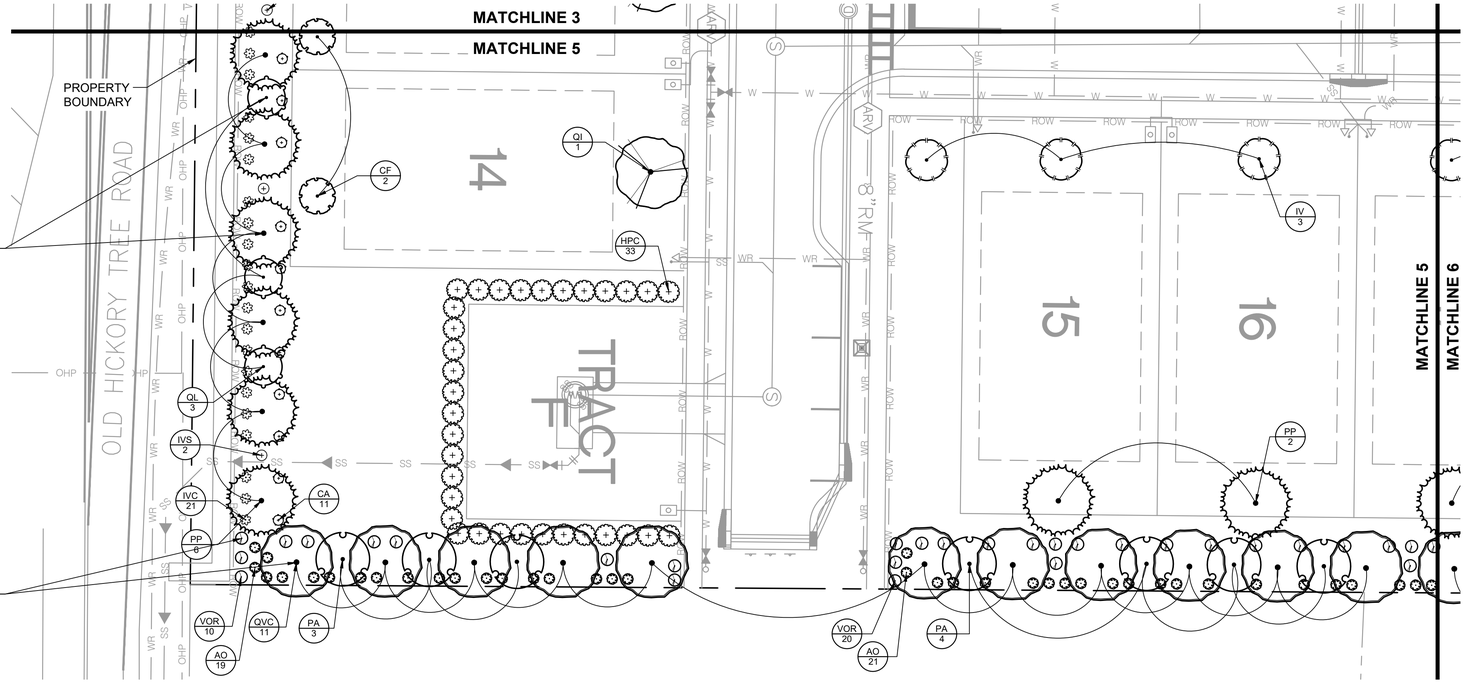
SHEET TITLE:

LANDSCAPE PLAN

SHEET NUMBER:

LP104

Know what's **below.**
Call before you dig.
Dial 811
Or Call 800-282-7411



WEST BUFFER
15' WIDE
(4 LRG TREE/100 LF)
(2.5 MED/SM TREE/100 LF)
(23 SHRUB/100 LF)
PER P.U.D.

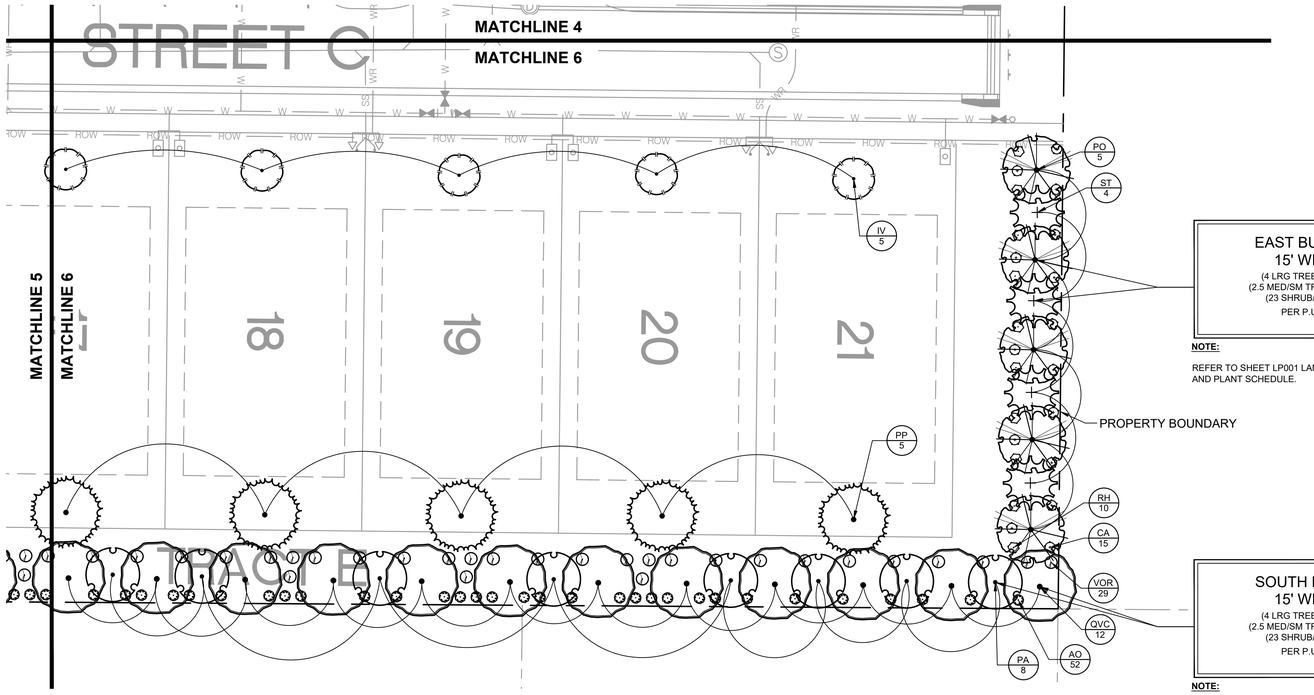
NOTE:

REFER TO SHEET LP001 LANDSCAPE REQUIREMENTS AND PLANT SCHEDULE.

SOUTH BUFFER
15' WIDE
(4 LRG TREE/100 LF)
(2.5 MED/SM TREE/100 LF)
(23 SHRUB/100 LF)
PER P.U.D.

NOTE:

REFER TO SHEET LP001 LANDSCAPE REQUIREMENTS AND PLANT SCHEDULE.



EAST BUFFER
15' WIDE
(4 LRG TREE/100 LF)
(2.5 MED/SM TREE/100 LF)
(23 SHRUB/100 LF)
PER P.U.D.

NOTE:

REFER TO SHEET LP001 LANDSCAPE REQUIREMENTS AND PLANT SCHEDULE.

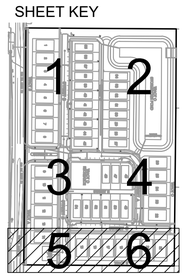
PROPERTY BOUNDARY

SOUTH BUFFER
15' WIDE
(4 LRG TREE/100 LF)
(2.5 MED/SM TREE/100 LF)
(23 SHRUB/100 LF)
PER P.U.D.

NOTE:

REFER TO SHEET LP001 LANDSCAPE REQUIREMENTS AND PLANT SCHEDULE.

SHEET KEY



20 0 10 20 40
SCALE: 1" = 20'

NORTH

CLIENT:

VISTA GRANDE PROPERTIES, LLC

3534 MEDITERRA DRIVE
CLERMONT, FL 34711

PROJECT:

OLD HICKORY TREE ESTATES

LOCATION:

OLD HICKORY TREE RD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

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REVISIONS	DATE
2 COUNTY COMMENTS	4-22-2025

DESIGNED BY: KAV
DRAWN BY: ECP
CHECKED BY: KAV
DATE: 05-09-2025

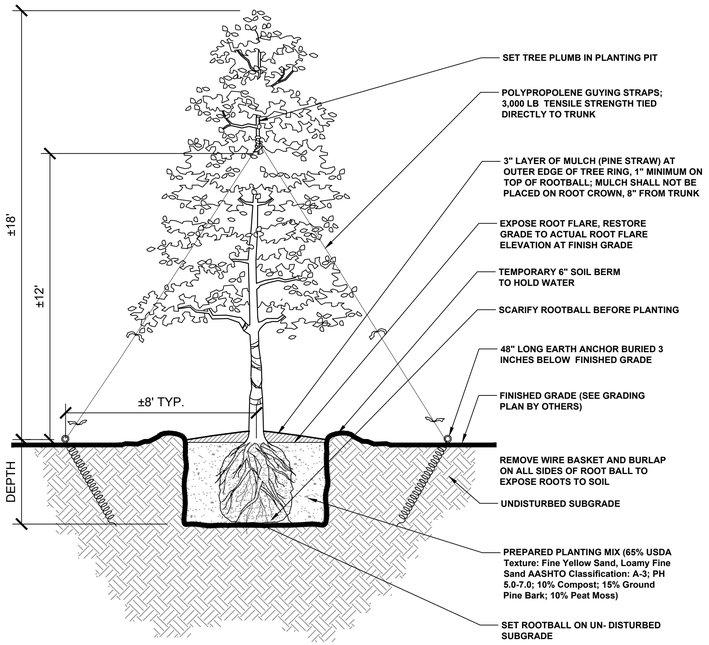
PROJECT NUMBER: 20240913OHE

SHEET TITLE:

LANDSCAPE PLAN

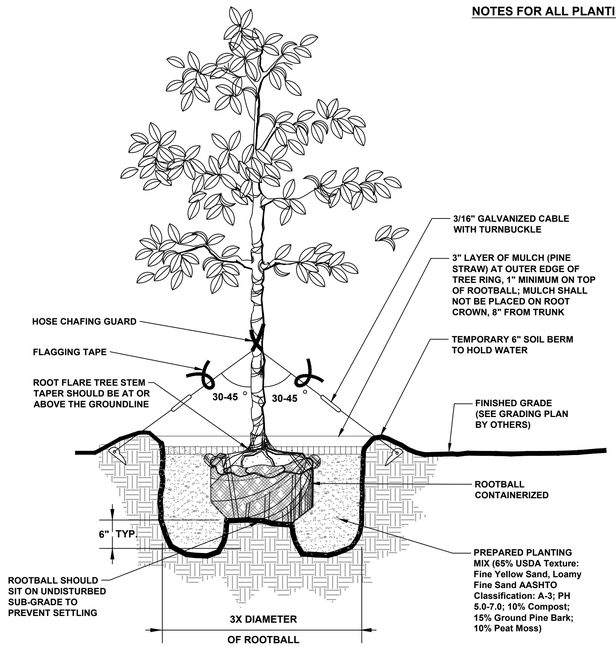
SHEET NUMBER:

LP105



LARGE TREE PLANTING & GUYING DETAIL

N.T.S.

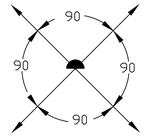


SMALL TREE PLANTING & GUYING DETAIL

N.T.S.

NOTES FOR ALL PLANTINGS:

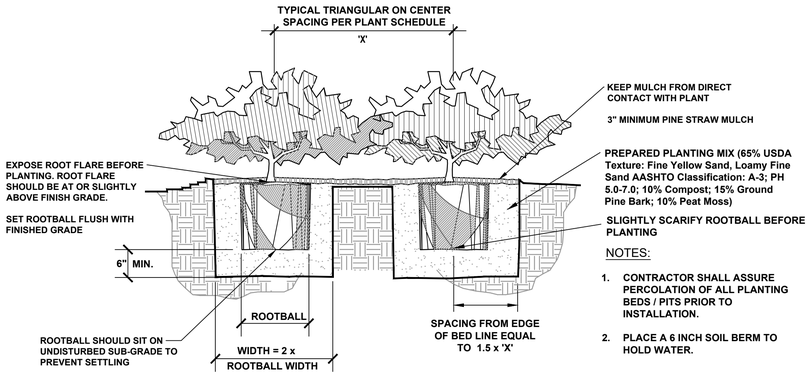
1. DO NOT MOUND OR INSTALL MULCH AGAINST THE TRUNK OR STEM OF TREES AND SHRUBS OR THE CROWN OF PERENNIALS AND GROUNDCOVERS. THERE SHOULD BE FREE AND OPEN AIR CIRCULATION AROUND THE TRUNK OF THE PLANT AND THE GROUND IN THE IMMEDIATE AREA AT THE BASE OF THE TRUNK.
2. CONTRACTOR TO REMOVE ALL WIRE BASKETS AND BURLAP FROM B&B PLANTS LEAVING ONLY THE FABRIC AND WIRE ON THE VERY BOTTOM OF BALL IF IMPOSSIBLE TO REMOVE.



STAKING DIAGRAM
PLAN VIEW

NOTES:

1. ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION. SEE LANDSCAPE NOTES ON SEPARATE SHEET.
2. WATERING REQUIREMENTS ARE DIFFERENT FOR EACH TREE SPECIES AND SOIL CONDITION. CONSULT AN ARBORIST AS TO THE APPROPRIATE WATER REGIMEN.
3. DISCARD SUBGRADE REMOVED FROM PLANTING PIT AND REPLACE WITH PREPARED SOIL MIX, PER SPECIFICATIONS. PLACE NEW SOIL MIX AROUND ROOTBALL IN SIX-INCH LAYERS, FIRMLY TAMPING AND WATERING EACH LAYER UNTIL THE PLANTING PIT IS FILLED TO FINISHED GRADE LEVEL.
4. TREES UNDER 3 INCH CALIPER DO NOT REQUIRE TO BE GUYED; HOWEVER CONTRACTOR IS RESPONSIBLE TO ENSURE TREES DO NOT BLOW OVER DURING MAINTENANCE PERIOD.

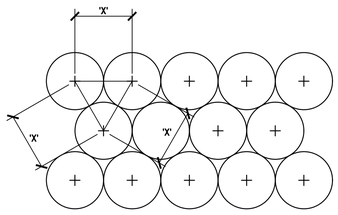


GROUNDCOVER & SHRUB PLANTING DETAIL

N.T.S.

NOTES:

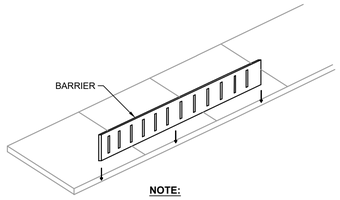
1. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING BEDS / PITS PRIOR TO INSTALLATION.
2. PLACE A 6 INCH SOIL BERM TO HOLD WATER.



ALL SHRUBS & GROUNDCOVER MASSES TO USE TRIANGULAR SPACING EXCEPT WHERE NOTED. REFER TO PLANT SCHEDULE FOR INDIVIDUAL PLANT SPACING 'X'

TYPICAL PLANT SPACING DETAIL

N.T.S.



ROOT BARRIER - MODEL NO: UB 12-2. INSTALLATION TO MEET MANUFACTURER AND ASTM STANDARDS.

QUANTITY: T.B.D.

DEPTH: 12"

MANUFACTURER: DEEPROOT GREEN INFRASTRUCTURE, LLC
CONTACT: INFO@DEEPROOT.COM
PHONE: (415) 781-9700
WEBSITE:
WWW.DEEPROOT.COM

OR, APPROVED EQUAL

NOTE:

PROVIDE 12" BARRIER AND INSTALL DIRECTLY BEHIND PROPOSED SIDEWALK. INSTALL BEFORE INSTALLING NEW TREES.

ROOT BARRIER - AXONOMETRIC VIEW

N.T.S.

CLIENT:

VISTA GRANDE PROPERTIES, LLC

3534 MEDITERRA DRIVE
CLERMONT, FL 34711

PROJECT:

OLD HICKORY TREE ESTATES

LOCATION:

OLD HICKORY TREE RD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

SEAL:



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REVISIONS	DATE

DESIGNED BY: KAV
DRAWN BY: ECP
CHECKED BY: KAV
DATE: 05-09-2025

PROJECT NUMBER: 20240913OHE

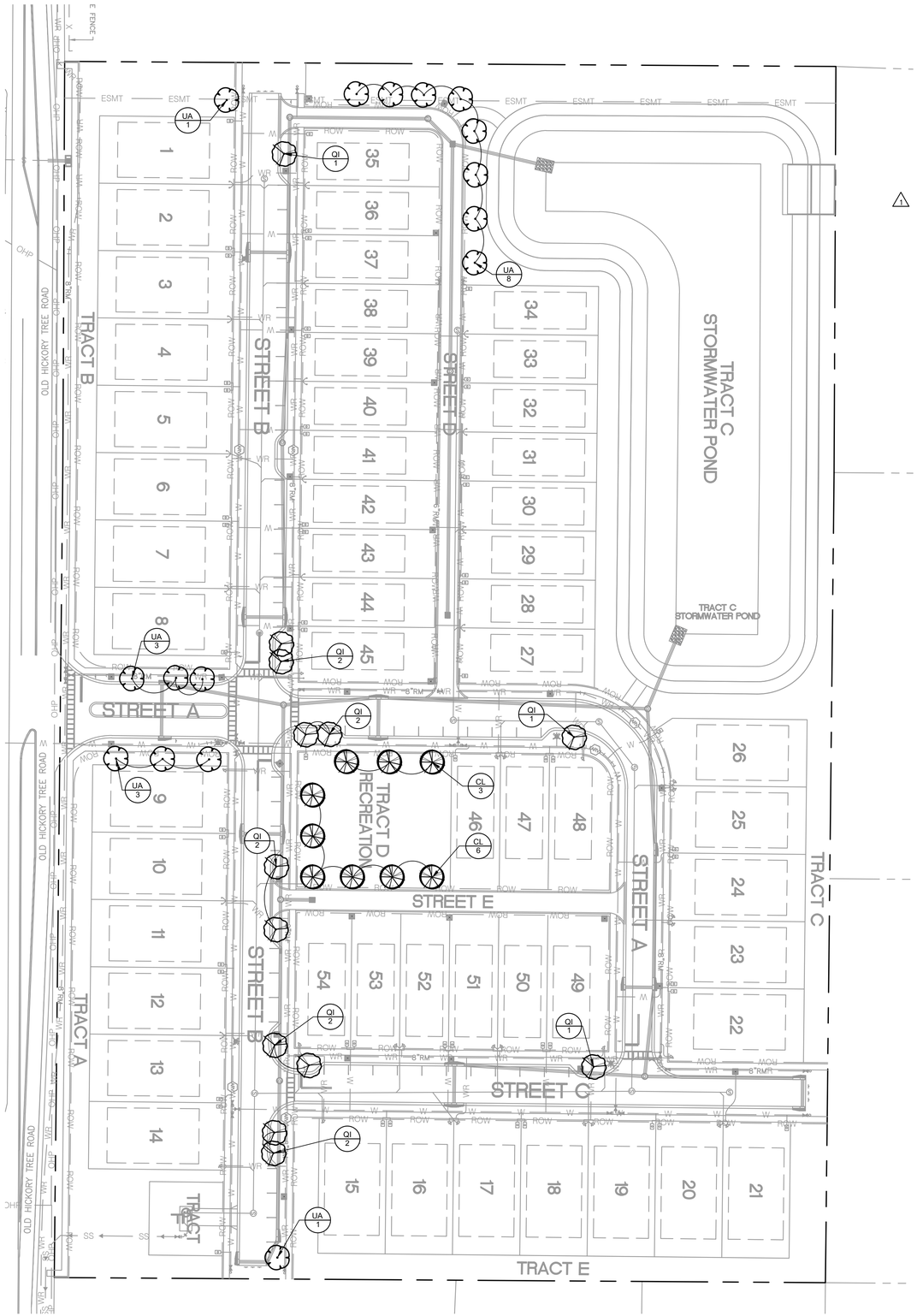
SHEET TITLE:

LANDSCAPE INSTALLATION DETAILS

SHEET NUMBER:

LP201

Know what's **below.**
Call before you dig.
Dial 811
Or Call 800-282-7411



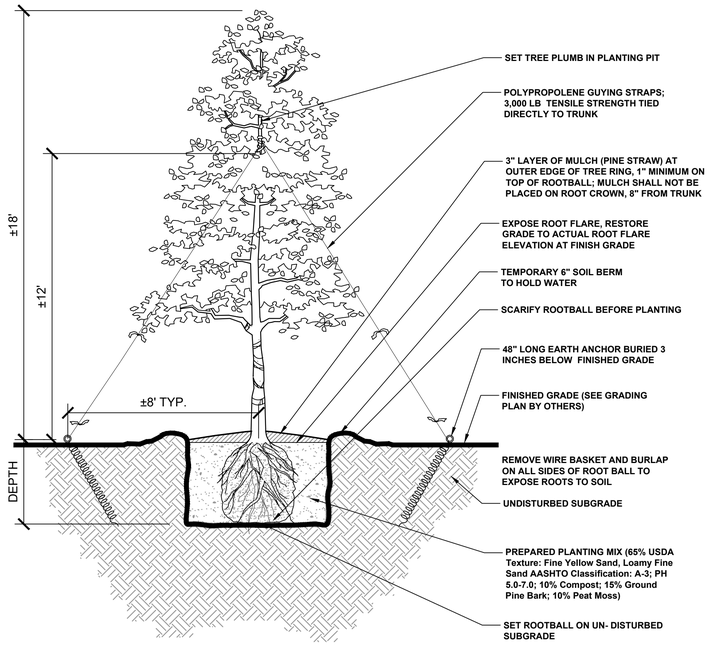
PLANT SCHEDULE					
SYMBOL	CODE	QTY	COMMON / BOTANICAL NAME	SIZE	SPECIFICATION
TREES					
	CL	9	SUGAR HACKBERRY CELTIS LAEVIGATA	65 GAL. / 3" CAL.	10-11' HT. X 4-5' SP.
	QI	13	BLUEJACK OAK QUERCUS INCANA	65 GAL. / 3" CAL.	10-11' HT. X 3-4' SP.
	UA	16 (2)	WINGED ELM ULMUS ALATA	65 GAL. / 3" CAL.	11-12' HT. X 4-5 SP.

LANDSCAPE CALC. & REQ. FOR ST. CLOUD

STREET TREES
INTERNAL ROADWAY PLANTING (PER SEC. 4.8.5.)
2,830 x 2 = 5,660 LF 1 LARGE TREE MAX EVERY 40 LF (55 LF WITH CURB CUTS, FIRE HYDRANTS AND OTHER INFRASTRUCTURE ELEMENTS) (2) = 103 LARGE TREES REQUIRED = 38 LARGE TREES PROVIDED*
* DUE TO UNDERGROUND WATER PIPE, UTILITY SERVICE LINES, STORM PIPE, & REUSE PIPE WITHIN THE AREA BETWEEN BACK OF CURB AND SIDEWALK WHERE INTERNAL STREET TREES WOULD BE PLANTED, AND A % OF THE STREETS VOID OF AREA BETWEEN BACK OF CURB AND SIDEWALK.

NOTES:

1. TREES TO BE INSTALLED AFTER LOTS ARE BUILT.
2. TREES TO BE INSTALLED CLEAR OF UTILITIES.
3. MULCH BELOW ALL TREES. TREES WITHIN SOD WILL HAVE 6 FT. DIAMETER MULCH RING.
4. IN AREAS WITHOUT PROPOSED PLANTS, INSTALL BAHIA SOD, PASPALUM NOTATUM 'ARGENTINE'. CONTRACTOR TO VERIFY SOD QUANTITIES.
5. CONTRACTOR TO COORDINATE WITH LANDSCAPE ARCHITECT (321) 338-4781. ALL PLANTS MUST BE LAID OUT IN FIELD AND APPROVED PRIOR TO PLANTING.
6. IF THERE IS A DISCREPANCY BETWEEN PLANTS ON THE PLAN(S) AND PLANTS IN THE PLANT SCHEDULE, THE PLANT SCHEDULE WILL PREVAIL.
7. SELECTIVE PRUNING ONLY FOR PLANT WITH DEAD, DISEASED, OR CROSSING BRANCHES. NEVER SHEAR OR TOP ANY TREE.



LARGE TREE PLANTING & GUYING DETAIL

N.T.S.

50 0 25 50 100
SCALE: 1" = 50'

NORTH

CLIENT:

VISTA GRANDE PROPERTIES, LLC

3534 MEDITERRA DRIVE
CLERMONT, FL 34711

PROJECT:

OLD HICKORY TREE ESTATES

LOCATION:

OLD HICKORY TREE RD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

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REVISIONS	DATE
1 COUNTY COMMENTS	3-28-2025
2 COUNTY COMMENTS	4-22-2025

DESIGNED BY: KAV
DRAWN BY: ECP
CHECKED BY: KAV
DATE: 05-09-2025

PROJECT NUMBER: 20240913OHE

SHEET TITLE:

INTERNAL STREET TREE PLAN

SHEET NUMBER:

LS101

Meeting: November 13, 2025

Agenda Item Type: Consent Agenda Minutes

City Clerk Agenda Item:
Minutes: July 10, 2025 / Regular Meeting

Strategic Key Focus Areas:

Background Information:

Legal Authority:

Budget and Recommendation:

Finance Director's Comments:

Procurement Director's Comments:

City Manager's Comments:

City Council Action:

Attachments:
1. 7-10-2025 Minutes FINAL

St. Cloud City Council Regular Meeting
Thursday, July 10, 2025
City Hall - Council Chambers
1300 9th Street
6:30 PM
Minutes

I. Mayor Robertson called the meeting to order at 6:30 p.m.

II. Invocation given by Pastor Ariel Sanabria from Soul City Church

III. Pledge of Allegiance

IV. Roll Call

♦ Mayor Chris Robertson	Veronica Miller, City Manager
♦ Deputy Mayor Ken Gilbert	Daniel Mantzaris, City Attorney
♦ Council Member Jennifer A. Paul	Ivy Llauro, City Clerk
♦ Council Member Kolby Urban	Stacey Wilde, City Clerk Coordinator
♦ Council Member Shawn Fletcher	Members of the Press

All members were present.

V. Agenda Update
To include continued or add-on items, corrections, and/or deletions of existing items as submitted by the City Manager.

City Manager, Veronica Miller requested the following changes: Consent item 2 was being pulled; Consent item 8 was to be heard with Public Hearings 2, 3 and 4; Council action item 1 was to be heard with Public Hearing 5.

VI. Presentations

- Presentation of Employee of the Month to William T. McFadden

Stephanie Holtkamp presented Willam T. McFadden with the Employee of the Month Award.

Mayor Robertson said it had been a hectic couple of months with all the additional meetings and wanted to assure the citizens that it was in search of transparency, ensuring that their tax dollars were being spent wisely, this was the Councils job. He stated they had done an exhaustive interview/ investigation on this, and he had spoken with the Human Resource Director, City Attorney and the City Manager and that they owe the Black Empowerment Community Council (BECC) a sincere apology. Some of the departments dropped the ball and they would do everything they could to ensure that it never happens again. He apologized to Ms. Tiffany Jeffers

and the Black Empowerment Community Council (BECC) for what happened. He would like to ask that the City Manager to draft formal apology from the City of St. Cloud. He said it was the City's fault.

City Manager, Veronica Miller, stated she would be happy to, and she agreed with Mayor Robertson.

Mayor Robertson made a motion to have the City Manager draft and formally send Tiffany Jeffers and the Black Empowerment Community Council (BECC) a written apology. Council Member Paul seconded the motion.

Mayor Robertson called for roll call, after roll call by City Clerk, Ivy Llauro motion carried. (Vote 5-0)

VII. Consent Agenda

The next portion of tonight's meeting is the consent agenda which contains items that have been determined to be routine and non-controversial. If anyone in the audience wishes to address a particular item on the consent agenda, now is the opportunity for you to do so. Additionally, if staff or members of the City Council wish to speak on a consent item, they have the same opportunity.

Mayor Robertson requested to pull item number 3.

1) Resolution No. 2025-053R, a resolution of the City Council of the City of St. Cloud, Florida, entering an agreement with Osceola County and Hawk Platt, LLC for the design, permitting, right of way dedication, and construction of framework roads within and adjacent to the Whaley Platt development; providing for mobility fee credits and authorizing the Mayor to execute this agreement and providing an effective date.
   COST: The City agrees to provide up to $22,354,157.35 in mobility fee credits to fund 2.7-miles of roadway improvements to Kissimmee Park Road, Lake Toho Road, and Boulevard F.
   This item is to authorize the Mayor to execute a Tri-Party Agreement between Osceola County, Hawk Platt, LLC, and the City of St. Cloud.
   The property is currently contiguous to City limits and within the Joint Planning Area (JPA) with Osceola County. As such, the City's participation in the agreement is intended to support a seamless transition of responsibilities and mobility fee credits in the event of annexation. The Notice of Encumbrance (NOE25-00006) was approved on June 12, 2025.

2) Resolution No. 2025-066R, a resolution of the City Council of the City of St. Cloud, Florida, entering an agreement with Osceola County and 5th Elevation CW, LLC for the design, permitting, right of way dedication, and construction of framework road adjacent to the Amavi development; providing for mobility fee credits and authorizing the Mayor to execute this agreement and providing an effective date.
   COST: The City agrees to provide up to $1,206,669.59 in mobility fee credits to fund roadway improvements to Avenue G.

This item is to authorize the Mayor to execute a Tri-Party Agreement between Osceola County, 5th Elevation CW, LLC, and the City of St. Cloud. The property is currently inside City limits.

This item was pulled.

3) Resolution No. 2025-087R, a resolution of the City Council of the City of St. Cloud, Florida, authorizing and directing the City Manager to enter into a first amendment to and extension of the continuing contracts between the City of St. Cloud and Ayres Associates, Inc., G-A-I Consultants, Inc., Klavon Design Associates, Inc., RVi Planning + Landscape Architecture, Inc., and Vanasse Hangen Brustlin, Inc. for Continuing Planning and Landscape Architectural Services, and providing an effective date.
   COST: Undetermined at this time as services are provided on an as-needed basis. This contract will be utilized by the various departments on an as-needed basis from various approved projects and budgeted expenditure accounts.
   This item is to approve the extension of the agreements for continuing planning and architectural services with Ayres Associates, Inc., G-A-I Consultants, Inc., Klavon Design Associates, Inc., Vanasse Hangen Brustlin, Inc., and RVi Planning + Landscape Architecture, Inc.

Mayor Robertson stated he had been heavily involved with other matters that he did not have the opportunity to look into these agreements. He requested they postpone voting on this until the next Council meeting.

Mayor Robertson made a motion to continue Resolution No. 2025-087R to the August 14, 2025, Council meeting. Deputy Mayor Gilbert seconded the motion.

Mayor Robertson called for roll call, after roll call by City Clerk, Ivy Llauro motion carried. (Vote 5-0)

4) Resolution No. 2025-102R, a resolution of the City Council of the City of St. Cloud, Florida, authorizing the City Manager to enter into agreements with Ajax Building Company, LLC, Arnco Construction, Balfour Beatty Construction, LLC, Charles Perry Partners, Inc., D.E. Scorpio Corporation, LEGO Construction Co., and Oelrich Construction, Inc., per Request for Qualifications (RFQ) 2025-055 Continuing Construction Manager at Risk Services for projects less than $7.5 million in value, and providing an effective date.
   COST: Undetermined at this time as goods and services are provided on a task authorization basis. These contracts will be utilized by various departments on an as-needed basis for various approved projects and budgeted expenditure accounts.
   This item is to approve agreements with Ajax Building Company, LLC, Arnco Construction, Balfour Beatty Construction, LLC, Charles Perry Partners, Inc., D.E. Scorpio Corporation, LEGO Construction Co., and Oelrich Construction, Inc., for Continuing Construction Manager at Risk Services for projects less than $7.5 million in value.

5) Resolution No. 2025-103R, a resolution of the City Council of the City of St. Cloud, Florida, authorizing and directing the City Manager to enter into a Negotiated Procurement Agreement with Nextran Corporation, for repair services and parts for Mack Trucks, and providing an effective date.
COST: Undetermined at this time as services are provided on an as-needed basis. This contract will be utilized by the City's Fleet Division for the purchase of vehicle repair services for Mack trucks, on an as-needed basis, from various approved and budgeted projects and expenditure accounts throughout the fiscal year.
This item is to establish a one-year negotiated procurement agreement for repair services for Mack trucks with Nextran Corporation, the authorized Mack dealer and sole source provider for repair services and parts in the Central Florida area.

6) Resolution No. 2025-104R, a resolution of the City Council of the City of St. Cloud, Florida, authorizing the Mayor to enter into an agreement between the City of St. Cloud, Florida, as an entitlement city, and Osceola Council on Aging for the execution of housing rehabilitation services in St. Cloud Villas I, in the amount of $140,000, utilizing community development block grant (CDBG) funding, and any amendments therefore; providing for conflict; and providing for an effective date.
COST: $140,000.00, CDBG Funds
This item is to authorize the Mayor to enter into an agreement for housing rehabilitation services in St. Cloud Villas I using CDBG funds.

7) Resolution No. 2025-108R, a resolution of the City Council of the City of St. Cloud, Florida, authorizing the City Manager to enter into a task authorization to the contract and agreement for Alternative Paving Methods with American Persian Engineering & Construction, LLC, dba APEC, LLC dated February, 16, 2022, and any amendments thereto for asphalt paving roads in Pinewood Gardens, Southern Pines, Deer Creek, and other poor condition roads (Budinger Avenue, Jacks Memorial, and Mutter Road), and providing an effective date.
COST: up to $2,343,585.20.
This item is to approve a task authorization with American Persian Engineering & Construction, LLC, dba APEC, LLC for asphalt paving roads in Pinewood Gardens, Southern Pines, Deer Creek, and other poor condition roads (Budinger Avenue, Jacks Memorial, and Mutter Road).

8) Request City Council's approval of a Mixed-Use Concept Plan for the Clay Whaley Road Mixed-Use, Project MCP24-00003
COST: No cost associated with this item.
This item is to approve an applicant-initiated adjustment to the East of Lake Toho Conceptual Master Plan to create a Neighborhood 2 Place Type for Clay Whaley Road Mixed-Use project. The concept plan proposes 400 multi-family units, generally located north of Clay Whaley Road, south Cross Prairie Parkway, east of Lake Tohopekaliga, and west of Florida's Turnpike.

Discussion for this item took place under Ordinance No. 2025-46.

Mayor Robertson announced the Consent Agenda for public comment, with no response from the audience.

Council Member Urban made a motion to approve the Consent Agenda minus items 2,3, and 8. Council Member Fletcher seconded the motion

Mayor Robertson called for roll call, after roll call by City Clerk, Ivy Llauro motion carried. (Vote 5-0)

VIII. Citizens Forum

Any person who desires to comment on any item not on this agenda is provided this opportunity to address the City Council. Each person is requested to complete a sign-in form to be provided to the presiding officer prior to, or as soon as is practical thereafter, the person addresses the Council.

Stan King, 804 Hemlock St, wanted to know if the City tried to negotiate with Osceola County before taking on Chisolm Park. He stated he was very upset about the excise tax on boat owners regarding the $6.00 boat parking fee.

Mayor Robertson stated they were there to listen to the citizens' concerns and did not have to respond. He tried to respond to his concerns, but was not able to because the resident left the room.

Kristen Nuzzo, 1018 Twisted Branch Lane, stated she was upset and concerned about a sports organization she believed misled her and other parents. She said that this organization claimed they were a nonprofit, and she researched them and found out they were not a nonprofit. She said she would share any information upon request.

Mayor Robertson stated they cared about all the citizens and did not want them to be defrauded. He asked Ms. Nuzzo to provide the information with the City Clerk's Office and they would look into this.

Jackie Fricchione, 4872 Chisholm Park Trail, thanked the Police Department specifically Seargent Lawson, Officer Black and Officer Waters for their assistance with speeders on the 4th of July. She also stated she might have a possible solution for the boat parking fee. She would like to discuss it in private to see if this could be something they would consider.

IX. Public Hearings

1) **FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-05,** an ordinance of the City Council of the City of St. Cloud, Florida, assigning a Future Land Use Designation to approximately +/- 1,378 acres identified as Edgewater West, Project #CPA24-00008, located east of Cherokee Road, northwest of Kissimmee Park Road, south of Clay Whaley Road from Mixed Use (County) to Mixed Use (City), providing for amending the official Future Land Use Map of the Comprehensive Plan, filing of the Planning

Commission recommendation and proof of publication, applicability and effect, severability, copies on file and effective date. (Above is full title) **ACTION ON ORDINANCE NO. 2025-05**

City Clerk, Ivy Llauro read the Final Public Hearing for Ordinance No. 2025-05 into the record by title.

Melissa Dunklin, Community Development Director reviewed the proposed Ordinance.

Mayor Robertson announced the Final Public Hearing for Ordinance No. 2025-05 for public comment, with no response from the audience.

Mayor Robertson asked if this was the property that was required to have more commercial.

Melissa Dunklin responded yes, with the zoning ordinance they recorded a restricted deed with the land to allow more commercial without staff having to go through a public hearing process.

Council Member Urban made a motion to adopt Ordinance No. 2025-05. Council Member Fletcher seconded the motion.

Mayor Robertson called for roll call, after roll call by City Clerk, Ivy Llauro motion carried. (Vote 4-1) Deputy Mayor Gilbert voted nay.

2) **FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-46**, an ordinance of the City Council of the City of St. Cloud, Florida, to annex into the City of St. Cloud approximately +/- 24.66 acres identified as Clay Whaley Road Mixed Use, Project # ANX24-00013, located north of Clay Whaley Road and west of Florida Turnpike; in accordance with the Voluntary Annexation Provisions of Chapter 171.044, Florida Statutes. (Above is full title) **ACTION ON ORDINANCE NO. 2025-46**

City Clerk, Ivy Llauro read the Final Public Hearing for Ordinance No. 2025-46, Ordinance No. 2025-47, Ordinance No. 2025-48 and Consent Item No. 8 into the record by title.

Melissa Dunklin, Community Development Director reviewed the proposed Ordinances and the Preliminary Subdivision Plan.

Mayor Robertson announced the Final Public Hearing for Ordinance No. 2025-46 for public comment.

John Adams, 8 Broadway Avenue, the applicant, stated they agreed with the staff's report and was available for any questions.

Deputy Mayor Gilbert asked about the distance to the new Florida Turnpike entrance.

Discussion followed to include the distances, project start and completion times, shutting down Clay Whaley Road, two-mile interchanges, and keeping high density near commercial properties.

Council Member Urban made a motion to adopt Ordinance No. 2025-46. Council Member Fletcher seconded the motion.

Mayor Robertson called for roll call, after roll call by City Clerk, Ivy Llauro motion carried. (Vote 5-0)

3) **FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-47**, an ordinance of the City Council of the City of St. Cloud, Florida, assigning a Future Land Use Designation of approximately +/- 24.66 acres identified as Clay Whaley Road Mixed Use, Project # CPA24-00017, located north of Clay Whaley Road and west of Floridas Turnpike from "MIX" Mixed Use (County) to "MIX" Mixed Use (City) providing for amending the official Future Land Use Map of the Comprehensive Plan, filing of the Planning Commission recommendation and proof of publication, applicability and effect, severability, copies on file and effective date. (Above is full title) **ACTION ON ORDINANCE NO. 2025-47**

City Clerk, Ivy Llauro read the Final Public Hearing for Ordinance No. 2025-47 into the record by title.

Discussion for this item took place under Ordinance No. 2025-46.

Council Member Paul made a motion to adopt Ordinance No. 2025-47. Council Member Urban seconded the motion.

Mayor Robertson called for roll call, after roll call by City Clerk, Ivy Llauro motion carried. (Vote 5-0)

4) **FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-48**, an ordinance of the City Council of the City of St. Cloud, Florida, providing for the Zoning Amendment of the Zoning Map of the Land Development Code of the City of St. Cloud, Florida, specifically changing the zoning designation of approximately +/- 24.66 acres identified as Clay Whaley Road Mixed Use, Project #ZMA24-00017, located north of Clay Whaley Road and west of Floridas Turnpike from "MIX" Mixed Use (County) to "MIX" Mixed Use (City) providing for amending the official Future Land Use Map of the Comprehensive Plan, filing of the Planning Commission recommendation and proof of publication, applicability and effect, severability, copies on file and effective date. (Above is full title) **ACTION ON ORDINANCE NO. 2025-48 (This is a Quasi-Judicial proceeding)**

City Clerk, Ivy Llauro read the Final Public Hearing for Ordinance No. 2025-48 into the record by title.

Discussion for this item took place under Ordinance No. 2025-46.

Deputy Mayor Gilbert made a motion to adopt Ordinance. No. 2025-48. Council Member Fletcher seconded the motion.

Mayor Robertson called for roll call, after roll call by City Clerk, Ivy Llauro motion carried. (Vote 5-0)

5) **FINAL PUBLIC HEARING FOR ORDINANCE NO. 2024-49**, an ordinance of the City Council of the City of St. Cloud, Florida, providing for the Zoning Amendment of the Zoning Map of the Land Development Code of the City of St. Cloud, Florida, specifically changing the zoning designation of approximately +/- 10.31 acres identified as Thomason Estates FKA Clark Property, Project #ZMA24-00006, from "A" Agriculture to "R-1B" Single Family Dwelling generally located south of Fertic Road and east of Michigan Avenue providing for amending the official Future Land Use Map of the Comprehensive Plan, filing of the Planning Commission recommendation and proof of publication, applicability and effect, severability, copies on file and effective date. (Above is full title) **ACTION ON ORDINANCE NO. 2024-49 (This is a Quasi-Judicial proceeding)**

City Clerk, Ivy Llauro read the Final Public Hearing for Ordinance No. 2025-49 into the record by title.

Melissa Dunklin, Community Development Director reviewed the proposed Ordinance and Council Action No. 1.

Mayor Robertson announced the Final Public Hearing for Ordinance No. 2025-49 for public comment.

Marc Stehli, 2602 East Livingston Street, stated they met with staff and made the changes that Council requested.

Council Member Urban made a motion to adopt Ordinance No. 2025-49. Deputy Mayor Gilbert seconded the motion.

Mayor Robertson called for roll call, after roll call by City Clerk, Ivy Llauro motion carried. (Vote 5-0)

6) **FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-51**, an ordinance of the City Council of the City of St. Cloud, Florida, amending and restating all sections of the City's Employee Handbook, providing for severability, conflict, and effective date. (Above is full title) **ACTION ON ORDINANCE 2025-51**

City Clerk, Ivy Llauro read the Final Public Hearing for Ordinance No. 2025-51 into the record by title.

Justin Kluesner, Human Resources Director, reviewed the proposed Ordinance.

Mayor Robertson announced the Final Public Hearing for Ordinance No. 2025-51 for public comment.

Kristen Nuzzo, 1018 Twisted Branch Lane, stated she managed 330 people in a team of 650 and they have had people leave for family issues. She said if they were a good employee they would gladly take them back and give them all their benefits.

Deputy Mayor Gilbert stated he did not agree with the reinstating vacation and sick time accruals when an employee leaves the City and comes back within 1 year.

Justin Kluesner explained they would still have to go through the hiring process, and it was not a guarantee the position would still be available to them.

City Manager, Veronica Miller, stated this recommended change happened because of public safety. She said it helped the Police and Fire Chiefs get experienced employees to come back to the City with these incentives.

Discussion followed to include having employee loyalty, the costs to re-hire and interview, the current policy, the bereavement policy.

Mayor Robertson made a motion to adopt Ordinance No. 2025-51 removing the one-year reinstating vacation and sick leave accruals. Council Member Paul seconded the motion.

Mayor Robertson called for roll call, after roll call by City Clerk, Ivy Llauro motion carried. (Vote 5-0)

7) **FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-52**, an ordinance of the City Council of the City of St. Cloud, Florida, pertaining to the enforcement of codes amending Section 2-282 “Applicable Codes and Ordinances” of the City Code, by adopting an amended exhibit “A” revising the list of codes enforceable by issuance of a citation; providing for conflict, severability, administrative correction, publication and an effective date. (Above is full title) **ACTION ON ORDINANCE NO. 2025-52**

City Clerk, Ivy Llauro read the Final Public Hearing for Ordinance No. 2025-52 into the record by title.

Melissa Dunklin, Community Development Director reviewed the proposed Ordinance.

Mayor Robertson announced the Final Public Hearing for Ordinance No. 2025-52 for public comment, with no response from the audience.

Mayor Robertson asked if they would not allow any fireworks in the City.

City Attorney Dan Mantzaris stated there were statutory exemptions, the state law allowed for use on certain holidays.

Discussion followed to include private event permits, open burning, initial warnings, issues on the Lakefront with motorized devices, signage, raising the mobile device and making it a cumulative fine with a max fine of $500.00.

Deputy Mayor Gilbert made a motion to adopt with the added condition of making the mobility devices a cumulative fine. Council Member Urban seconded the motion.

Mayor Robertson called for roll call, after roll call by City Clerk, Ivy Llauro motion carried. (Vote 5-0)

X. Council Action

1) Request City Council's approval of a Preliminary Subdivision Plan for the Thomason Estates FKA Clark Property, Project #PSP24-00005.

City Clerk, Ivy Llauro read Council Action No. 1 into the record by title.

Deputy Mayor Gilbert asked if the hammerhead would be adequate for the fire and garbage trucks.

Jason Miller, Fire Chief stated he would like in the future to have two access points or an exit only in the parking lot area. He said that this met the fire code as far as travel distances, he was just not a fan of the stabilized soil in the vacant lot.

Discussion followed to include paving the stabilized soil, adding more access points to future developments, and possibly adding an access point to come out onto Fertic Road.

Jerom Fertic, 50 Fertic Road, stated he came up with an alternate solution by flipping the parking lot to the green space and showed the Council on the screen the proposed changes. He expressed his concerns with the blind spot and flooding on Michigan Avenue.

Marc Stehli responded and said the western road stub to the south was a road stub that had been requested by the City and they said they wanted to maintain it for connectivity to the south. He said there would not be a gate that the Fire Department would have to open. There was overgrown vegetation where the blind spot was, and it did block the line of site. The trees they would put there would be six feet and maintained per the Florida Department of Transportation regulations.

Deputy Mayor Gilbert stated they were so close to satisfying everybody.

Discussion followed to include a roundabout, second exit, future connectivity, Michigan Avenue and Fertic Road issues, possibly moving the berm, relocating the fire hydrant, and moving the stop sign back, the project length and cost, and the citizens' concerns.

Scott Glasscock, 3074 South Delaware Avenue, stated if they adjusted the corner slightly they would not need another road going into property that they did not have.

Council Member Urban made a motion to approve Council Action No. 1 with the conditions of the changing the site plan suggested by Mr. Fertic, fixing the intersection at Michigan Avenue and Fertic Road and having the final engineering site plan come back to Council for approval. Mayor Robertson seconded the motion.

Mayor Robertson called for roll call, after roll call by City Clerk, Ivy Llauro motion carried. (Vote 5-0)

Mayor Robertson requested a short recess.

2) Discussion and possible action regarding appointments to boards and committees with vacancies for the Historic Preservation Board and Recreation Advisory Committee.

City Clerk, Ivy Llauro read Council Action No. 2 into the record by title.

Deputy Mayor Gilbert requested that alternate seats be moved up to the vacant slots in future appointments.

City Attorney, Dan Mantzaris stated if Council wanted to change that as a formal policy they could. It would have to come back to Council for final approval.

Discussion followed to include the attendance records of the alternate seat members and making sure they want to be moved up.

The following appointments were made to the Historic Preservation Board
Seat #2 – Elizabeth Lamug
Seat #7 – Carmen Hernandez
Alt #1 – Victoria Moore
Alt #2 – Ekaterina Akulova

Council Member Urban made a motion to approve the appointments. Council Member Paul seconded the motion.

Council requested an attendance record for the next meeting.

Mayor Robertson called for roll call, after roll call by City Clerk, Ivy Llauro motion carried. (Vote 5-0)

The following appointments were made to the Recreation Advisory Board

Seat #2 – Crystal Rosario

Council Member Paul made a motion to approve the appointments. Council Member Fletcher seconded the motion.

Mayor Robertson called for roll call, after roll call by City Clerk, Ivy Llauro motion carried. (Vote 5-0)

XI. First Readings and Introduction

The next items on the agenda are Ordinances before the Council for First Reading and Introduction for the sole purpose of the Council to authorize the publication of the ordinance for a final hearing. The Council will not take final action on the item tonight. Full presentations and public input on the ordinances will occur at the Final Hearing at which the Council will consider final action.

There were First Readings and Introductions at this time.

XII. City Attorney

City Attorney, Dan Mantzaris stated the Savannah Park Homeowners Association approved the offer regarding the acquisition of a property for the Rummell Road Trail and they would be moving forward with that project.

XIII. City Manager

City Manager, Veronica Miller stated the Geographical Information System hub was now live on the City website.

XIV. Mayor and Council Members

Council Member Paul stated she would not be able to attend the budget workshop on Monday. She believed they had reached an agreement with the Chamber and Main Street and asked for this to be brought back at the August Workshop.

Council consensus was to bring this back at the August workshop.

She said there had been some concerns from residents regarding sections of St. Cloud that was considered "Colored Quarter" and she recommended that the legal description be updated for Myrtle Avenue, Pine Avenue and a property on 10th Street about 31 properties. She requested it be changed from "Colored Quarter" to "East St. Cloud Quarter". She requested the City have a community meeting and to move forward with the replating of the "Colored Quarter" to "East St. Cloud Quarter".

Mayor Robertson agreed that the name should be changed.

City Attorney, Dan Mantzaris stated that it was platted like that, and it would be a process to get it changed and he agreed the community meeting would be vital to getting the plats changed.

Council consensus was to move forward with the process to replat this section.

Council Member Urban stated he would like the Council to consider conducting a study to evaluate the feasibility and staffing requirements and potential cost of implementing a similar model in our City for the Fire Department. He requested to look into the study carried out by Kissimmee regarding the Fire Department and possibly adopt the same model.

Council consensus was to look into getting the study done.

Council Member Fletcher stated the 4th of July was amazing and the staff did a wonderful job.

Deputy Mayor Gilbert provided information to the Council regarding the dollars available to Osceola County through MetroPlan and requested a future workshop to provide further information.

Council consensus was to bring this back at a future workshop.

Mayor Robertson stated the 4th of July was amazing. He thanked the staff that attended the Osceola Update on behalf of the Council.

XV. Information Section and Report Section

Reports:

Warrant List # 9 FY 25

- Monday, July 14, 2025 – City Council Budget Workshop – 1:00 p.m. @ City Hall, Council Chambers
- Tuesday, July 15, 2025 – City Council Workshop – 9:00 a.m. @ City Hall, Council Chambers
- Thursday, August 14, 2025 – City Council Meeting – 6:30 p.m. @ City Hall, Council Chambers

XVI. Adjournment: 9:28 p.m.

_____

Mayor Christian B. Robertson

ATTEST:

_____

City Clerk, Ivy Llauro

Minute Approved: _____

Meeting: November 13, 2025

Agenda Item Type: Public Hearings
Resolution No. 2025-154R - Budget Amendment #1 FY25/26

Finance Agenda Item:
PUBLIC HEARING FOR RESOLUTION NO. 2025-154R, a resolution of the City Council of the City of St. Cloud, Florida, amending Resolution Number 2025-098R which adopted the fiscal year 2025/2026 budget for the City of St. Cloud, finding the City Manager has certified there are prior year fund balances and or current revenues available in the budget for additional projects and programs in various funds not included in the original budget, requiring the budget to be increased to include said additional funding in the various funds and making supplemental appropriations within the funds. (Above is full title) **ACTION ON RESOLUTION NO. 2025-154R**

Strategic Key Focus Areas:
High-Performing Government

Background Information:
BACKGROUND INFORMATION:
If during the fiscal year, the manager certifies that there are available for appropriation revenue in excess of those estimated in the budget, the City Council may, by resolution, make supplemental appropriation for the year up to the amount of each excess. This budget amendment number one is necessary to ensure funds are placed in the needed projects and the line items to procure services and equipment.

Specifically, this amendment provides funding for:

1. To recognize the first year (partial) for the 2025 SAFER grant award and the associated expenditures for salaries, benefits, bunker gear, uniforms, and housing (modular lease). Prior year fund balance is being used for the City match portion of the SAFE grant, and Fire Impact Fees are being used for the bunker gear..
2. For the purchase of a Fire Rescue boat. A grant of $170,000 from the Division of State Fire Marshall is being utilized, with the remainder coming from prior year fund balance.
3. Funding to replace two Police vehicles that are currently being leased. It has been determined that purchase is financially more prudent than leasing over the long term.
4. For the Civic Center - Gym A window replacement. This funding was originally budgeted in fiscal year 2024/2025 and is being moved forward to complete the work this fiscal year.
5. To recognize the contribution from Osceola County for project PR2303 Partin Triangle Park.
6. To fund project PW2601 City Hall Security Enhancements.
7. To establish project PR2603 Centennial Park Restroom, which is replacing project CR2402 Centennial Park Renovations, as the funding source is being changed from CRA

to Parks Impact Fees.

8. One additional Police Officer position for the Lakefront area has been added. This will cover their vehicle, emergency lighting, radios, laptops, and other emergency equipment.
9. For the implementation of a relay web permitting application and upgrade of plan review software.

Legal Authority:
Florida Statutes Chapter 166.241 and City Code sec. 2-212- Amendments after adoption.

Budget and Recommendation:
Staff recommends **APPROVAL** of this request

Finance Director's Comments:
Finance Director recommends **APPROVAL** of this item.

Procurement Director's Comments:
N/A

City Manager's Comments:
City Manager recommends approval

City Council Action:
11/13/2025 - Final Action

Attachments:
1. Resolution 2025-154R Budget Amendment #1.Resolution (1)
2. Resolution 2025-154R Budget Amendment #1.Memo
3. Resolution 2025-154R Budget Amendment #1.Documentation

RESOLUTION - NO. 2025-154R

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA AMENDING RESOLUTION NUMBER 2025-098R WHICH ADOPTED THE FISCAL YEAR 2025/2026 BUDGET FOR THE CITY OF ST. CLOUD, FINDING THE CITY MANAGER HAS CERTIFIED THERE ARE PRIOR YEAR FUND BALANCES AND OR CURRENT REVENUES AVAILABLE IN THE BUDGET FOR ADDITIONAL PROJECTS AND PROGRAMS IN VARIOUS FUNDS NOT INCLUDED IN THE ORIGINAL BUDGET, REQUIRING THE BUDGET TO BE INCREASED TO INCLUDE SAID ADDITIONAL FUNDING IN THE VARIOUS FUNDS AND MAKING SUPPLEMENTAL APPROPRIATIONS WITHIN THE FUNDS.

WHEREAS, the City Manager has certified there are fund balances available in the fiscal year 2025/2026 budget. The original fiscal year 2025/2026 budget as adopted by City Council in Resolution No. 2025-098R did not include these amounts, requiring the budget to be adjusted.

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ST. CLOUD FLORIDA, as follows:

Section 1. The budget as established for fiscal year 2025/2026 is hereby amended to change the line items and projects within the funds by the amount and funding source shown:

GENERAL FUND	**INCREASE**	**DECREASE**
REVENUES:		
General Fund, Prior Year Fund Balance	2,842,867	
General Fund, Federal Grants, Public Safety	2,500,000	
General Fund, State Grants, Fire	170,000	
	5,512,867	-
EXPENDITURES:		
General Fund, Fire, Salaries & Wages	2,200,000	
General Fund, Fire, Employer FICA	170,000	
General Fund, Fire, Pension/ICMA	858,000	
General Fund, Fire, Health Insurance	450,000	
General Fund, Fire, Dental Insurance	12,000	
General Fund, Fire, Life Insurance	6,000	
General Fund, Fire, Disability Insurance	10,000	
General Fund, Fire, Workers Comp Insurance	60,000	
General Fund, Fire, Professional Services	12,000	
General Fund, Fire, Medical Care	42,000	
General Fund, Fire, Rentals & Leases	180,000	
General Fund, Fire, Maintenance Contracts	9,400	
General Fund, Fire, Operating Supplies	235,300	
General Fund, Fire, Taxable Uniform	10,800	
General Fund, Fire, Uniform Exempt from Wages	120,339	
General Fund, Fire, Training	232,680	
General Fund, Fire, Machinery & Equipment	810,000	
General Fund, EMS, Professional Services	1,348	
General Fund, EMS, Machinery & Equipment	93,000	
	5,512,867	-

ONE PERCENT FUND	**INCREASE**	**DECREASE**
REVENUES:		
One Percent Fund, Prior Year Fund Balance	630,000	
	630,000	-
EXPENDITURES:		
One Percent Fund, Interfund transfers, Capital Projects Fund	250,000	
One Percent Fund, Public Works, Buildings	200,000	
One Percent Fund, Police, Machinery & Equipment	180,000	
	630,000	-

CAPITAL PROJECTS FUND	**INCREASE**	**DECREASE**
REVENUES:		
Capital Projects Fund, Donations, Parks & Recreation	404,791	
Capital Projects Fund, Interfund transfer, One Percent Surcharge Fund	250,000	
Capital Projects Fund, Interfund transfer, Park Impact Fees	601,580	
	1,256,371	-
EXPENDITURES:		
Capital Projects Fund, Other Improvements, PR2303	404,791	
Capital Projects Fund, Buildings, PW2601	250,000	
Capital Projects Fund, Buildings, PR2603	601,580	
	1,256,371	-

PARKS IMPACT FEES	**INCREASE**	**DECREASE**
REVENUES:		
Parks Impact Fee Fund, Prior Year Fund Balance	601,580	
	601,580	-
EXPENDITURES:		
Parks Impact Fees, Intragovernmental transfers, Capital Projects	601,580	
	601,580	-

POLICE IMPACT FEES	**INCREASE**	**DECREASE**
REVENUES:		
Police Impact Fee Fund, Prior Year Fund Balance	120,600	
	120,600	-
EXPENDITURES:		
Police Impact Fees, Operating Supplies	50,200	
Police Impact Fees, Machinery & Equipment	70,400	
	120,600	-

FIRE IMPACT FEE FUND	**INCREASE**	**DECREASE**
REVENUES:		
Fire Impact Fees, Prior Year Fund Balance	106,504	
	106,504	-
EXPENDITURES:		
Fire Impact Fees, Operating Supplies	376,080	
Fire Impact Fees, Contingency		269,576
	376,080	269,576

BUILDING FUND	**INCREASE**	**DECREASE**
REVENUES:		
Building Fund, Prior Year Fund Balance	283,780	
	283,780	-
EXPENDITURES:		
Building Fund, Professional Services	211,050	
Building Fund, Maintenance Contracts	55,755	
Building Fund, Training	16,975	
	283,780	-

Section 2. This resolution will become effective immediately upon its adoption, but shall not be codified as a part of the St. Cloud City Code.

PASSED AND ADOPTED this_____day of _____, 2025.

CITY OF ST. CLOUD

ATTEST:

_____
Christian B. Robertson, Mayor

_____
Ivy Llauro, City Clerk

LEGAL IN FORM AND VALID IF ADOPTED.
de Beaubien, Simmons, Knight, Mantzaris & Neal, LLP

_____
Daniel F. Mantzaris, City Attorney

MEMORANDUM

Date: November 13, 2025
To: Veronica Miller, City Manager
From: Jeffrey M. Cooper, Finance Director
Subject: Detail for Budget Amendment number one via Resolution 2025-154R

This memorandum provides the detail of the amendments needed and the respective departments or projects that are affected for the first budget amendment to the fiscal year 2025/2026 budget.

Fund	Account	Increase	Decrease	Reason
General Fund	Revenue, Prior Year Fund Balance	2,842,867		
	Revenue, Federal Grants, Public Safety	2,500,000		2025 SAFER Grant
	Revenue, State Grants, Fire	170,000		Fire Rescue Boat Grant
	Expenditures, Fire, Salaries & Wages	2,200,000		
	Expenditures, Fire, Employer FICA	170,000		
	Expenditures, Fire, Pension/ICMA	858,000		
	Expenditures, Fire, Health Insurance	450,000		
	Expenditures, Fire, Dental Insurance	12,000		
	Expenditures, Fire, Life Insurance	6,000		
	Expenditures, Fire, Disability Insurance	10,000		
	Expenditures, Fire, Workers Comp Insurance	60,000		
	Expenditures, Fire, Professional Services	12,000		
	Expenditures, Fire, Medical Care	42,000		
	Expenditures, Fire, Rental & Leases	180,000		
	Expenditures, Fire, Maintenance Agreements	9,400		
	Expenditures, Fire, Operating Supplies	235,300		
	Expenditures, Fire, Taxable Uniform	10,800		
	Expenditures, Fire, Uniform Exempt from Wages	120,339		
	Expenditures, Fire, Training	232,680		
	Expenditures, Fire, Machinery & Equipment	300,000		
	Expenditures, Fire, Machinery & Equipment	510,000		Fire Rescue Boat
	Expenditures, EMS, Professional Services	1,348		
	Expenditures, EMS, Machinery & Equipment	93,000		
One Percent Fund	Revenue, Prior Year Fund Balance	630,000		
	Expenditures, Police, Machinery & Equipment	180,000		Replace two leased vehicles
	Expenditure, Public Works, Buildings	200,000		Civic Center - Gym A window replacement
	Expenditures, Intragovernment transfers, Capital Projects	250,000		Project PW2601 City Hall Security Enhancements
Capital Projects Fund	Revenue, Interfund transfer, One Percent Surcharge Fund	250,000		
	Revenue, Interfund transfer, Parks Impact Fee Fund	601,580		
	Revenue, Donations, Parks & Recreation	404,791		
	Expenditure, Capital Projects, Buildings	250,000		Project PW2601 City Hall Security Enhancements
	Expenditure, Capital Projects, Buildings	601,580		Project PR2603 Centennial Park Restroom
	Expenditure, Capital Projects, Other Improvements	404,791		Project PR2303 Partin Triangle Park
Parks Impact Fee Fund	Revenue, Prior Year Fund Balance	601,580		
	Expenditure, Interfund transfer, Capital Projects Fund	601,580		Project PR2603 Centennial Park Restroom
Police Impact Fee Fund	Revenue, Prior Year Fund Balance	120,600		
	Expenditure, Operating Supplies	50,200		One additional Police Officer for the Lakefront
	Expenditure, Machinery & Equipment	70,400		One additional Police Officer for the Lakefront
Fire Impact Fee Fund	Revenue, Prior Year Fund Balance	106,504		
	Expenditure, Operating Supplies	376,080		48 additional firefighters
	Expenditure, Contingency		269,576	
Building Permit Fund	Revenue, Prior Year Fund Balance	283,780		
	Expenditure, Professional Services	211,050		Selectron and project dox
	Expenditure, Maintenance Contracts	55,755		Selectron and project dox
	Expenditure, Training	16,975		Selectron and project dox

CITY OF ST. CLOUD
BUDGET AMENDMENT
REQUEST

BUDGET AMENDMENT #: 1
FUND #: 001/340

DATE: 10/07/25
DEPARTMENT: Fire

Reason/Justification for requested amendment:

To recognize the first year (partial) for the 2025 SAFER grant award and the associated expenditures for salaries, benefits, bunker gear, uniforms, and housing (modular lease). Prior year fund balance is being used for the City match portion of the SAFE grant and Fire Impact Fees are being used for the bunker gear.

Recommended Funding Source	Amount	Account Number (Finance will complete)
Prior Year Fund Balance:	001-0000-301-00-00	$2,502,867
Prior Year Fund Balance:	340-0000-301-00-00	$106,504
Revenue:	001-0000-331-20-00	$2,500,000
Revenue:		

Expenditure Accounts Additions Requested:

ACCOUNT NUMBER	ACCOUNT NAME	PROJECT	AMOUNT
001-6510-522-12-00	Salaries & Wages		$2,200,000
001-6510-522-21-00	Employer FICA		$170,000
001-6510-522-22-00	Pension/ICMA		$858,000
001-6510-522-23-01	Health Insurance		$450,000
001-6510-522-23-02	Dental Insurance		$12,000
001-6510-522-23-03	Life Insurance		$6,000
001-6510-522-23-04	Disability Insurance		$10,000
001-6510-522-24-00	Workers Comp Insurance		$60,000
001-6510-522-31-00	Professional Services		$12,000
001-6510-522-31-01	Medical Care		$42,000
001-6510-522-44-00	Rental & Leases		$180,000
001-6510-522-46-01	Maintenance Contracts		$9,400
001-6510-522-52-00	Operating Supplies		$235,300
001-6510-522-52-15	Taxable Uniform		$10,800
001-6510-522-52-16	Uniform Exempt from Wages		$120,339
001-6510-522-55-00	Training		$232,680
001-6510-522-64-00	Machinery & Equipment		$300,000
001-6520-526-31-00	Professional Services		$1,348
001-6520-526-64-00	Machinery & Equipment		$93,000
340-6510-522-52-00	Operating Supplies		$376,080
340-9595-522-99-00	Contingency		($269,576)

DEPARTMENT HEAD

DIRECTOR OF FINANCE

CITY MANAGER

Item	Cost Each	Quantity	Extended Cost	Total
Salaries and Benefits				
Promo Lt to AC wages	**$9,878.90**	**3**	**$29,636.69**	**$29,636.69**
Medicare (FICA)	$143.24	3	$429.73	$429.73
Soc Sec (FICA)	$612.49	3	$1,837.47	$1,837.47
Pension Benefit	$3,852.77	3	$11,558.31	$11,558.31
Health Insurance	$0.00	3	$0.00	$0.00
Dental Insurance	$0.00	3	$0.00	$0.00
Long Term Disability	$39.52	3	$118.55	$118.55
Life Insurance	$1.78	3	$5.33	$5.33
Workers Comp	$1,139.04	3	$3,417.11	$3,417.11
Sub Total			$47,003.19	
Promo Eng to Lt	**$4,197.96**	**9**	**$37,781.64**	**$37,781.64**
Medicare (FICA)	$60.87	9	$547.83	$547.83
Soc Sec (FICA)	$260.27	9	$2,342.46	$2,342.46
Pension Benefit	$1,637.20	9	$14,734.84	$14,734.84
Health Insurance	$0.00	9	$0.00	$0.00
Dental Insurance	$0.00	9	$0.00	$0.00
Long Term Disability	$16.79	9	$151.13	$151.13
Life Insurance	$0.76	9	$6.80	$6.80
Workers Comp	$484.02	9	$4,356.22	$4,356.22
Sub Total			$59,920.93	
Promo FF to Eng	**$3,581.96**	**15**	**$53,729.33**	**$53,729.33**
Medicare (FICA)	$51.94	15	$779.08	$779.08
Soc Sec (FICA)	$222.08	15	$3,331.22	$3,331.22
Pension Benefit	$1,396.96	15	$20,954.44	$20,954.44
Health Insurance	$0.00	15	$0.00	$0.00
Dental Insurance	$0.00	15	$0.00	$0.00
Long Term Disability	$14.33	15	$214.92	$214.92
Life Insurance	$0.64	15	$9.67	$9.67
Workers Comp	$413.00	15	$6,194.99	$6,194.99

Sub Total			$85,213.63	
SAFER Hiring FF/EMT 12/1/25	$19,113.90	12	$229,366.80	$229,366.80
Medicare (FICA)	$277.15	12	$3,325.82	$3,325.82
Soc Sec (FICA)	$1,185.06	12	$14,220.74	$14,220.74
Pension Benefit	$7,454.42	12	$89,453.05	$89,453.05
Health Insurance	$4,788.00	12	$57,456.00	$57,456.00
Dental Insurance	$344.00	12	$4,128.00	$4,128.00
Long Term Disability	$76.46	12	$917.47	$917.47
Life Insurance	$3.44	12	$41.29	$41.29
Workers Comp	$2,203.83	12	$26,445.99	$26,445.99
Sub Total			$425,355.16	
SAFER Hiring FF/EMT Trainee 1/1/26	$12,905.69	12	$154,868.22	$154,868.22
Medicare (FICA)	$187.13	12	$2,245.59	$2,245.59
Soc Sec (FICA)	$800.15	12	$9,601.83	$9,601.83
Pension Benefit	$5,033.22	12	$60,398.61	$60,398.61
Health Insurance	$3,591.00	12	$43,092.00	$43,092.00
Dental Insurance	$258.00	12	$3,096.00	$3,096.00
Long Term Disability	$51.62	12	$619.47	$619.47
Life Insurance	$2.32	12	$27.88	$27.88
Workers Comp	$1,488.03	12	$17,856.31	$17,856.31
Sub Total			$291,805.90	
SAFER Hiring FF/PM 12/1/25	$22,561.50	12	$270,738.00	$270,738.00
Medicare (FICA)	$327.14	12	$3,925.70	$3,925.70
Soc Sec (FICA)	$1,398.81	12	$16,785.76	$16,785.76
Pension Benefit	$8,798.99	12	$105,587.82	$105,587.82
Health Insurance	$4,788.00	12	$57,456.00	$57,456.00
Dental Insurance	$344.00	12	$4,128.00	$4,128.00
Long Term Disability	$90.25	12	$1,082.95	$1,082.95
Life Insurance	$4.06	12	$48.73	$48.73
Workers Comp	$2,601.34	12	$31,216.09	$31,216.09
Sub Total			$490,969.05	

SAFER Hiring FF/PM Trainee 1/1/25	$15,232.82	12	$182,793.78	$182,793.78	
Medicare (FICA)	$220.88	12	$2,650.51	$2,650.51	
Soc Sec (FICA)	$944.43	12	$11,333.21	$11,333.21	
Pension Benefit	$5,940.80	12	$71,289.57	$71,289.57	
Health Insurance	$7,182.00	12	$86,184.00	$86,184.00	
Dental Insurance	$516.00	12	$6,192.00	$6,192.00	
Long Term Disability	$60.93	12	$731.18	$731.18	
Life Insurance	$2.74	12	$32.90	$32.90	
Workers Comp	$1,756.34	12	$21,076.12	$21,076.12	
Sub Total			$382,283.28		
OT Training Academy *4	$30,240.00	3	$90,720.00	$90,720.00	
Medicare (FICA)	$438.48	3	$1,315.44	$1,315.44	
Soc Sec (FICA)	$1,874.88	3	$5,624.64	$5,624.64	
Pension Benefit	$11,793.60	3	$35,380.80	$35,380.80	
Health Insurance		3	$0.00	$0.00	
Dental Insurance		3	$0.00	$0.00	
Long Term Disability	$120.96	3	$362.88	$362.88	
Life Insurance	$5.44	3	$16.33	$16.33	
Workers Comp	$3,486.67	3	$10,460.02	$10,460.02	
Sub Total			$143,880.11		
Salaries & Benefits Total 6510				**$1,873,271.14**	**$1,873,271.14**
Capital Items Fire 6510					
Radios mobile	$9,269.40	2	$18,538.80	$18,538.80	
Radios Portables	$9,254.00	10	$92,540.00	$92,540.00	
Mach Alert	$200,000.00	0	$0.00	$0.00	
SCBA	$7,502.00	18	$135,036.00	$135,036.00	
Extrication	$53,660.00	1	$53,660.00	$53,660.00	
Sub Total			$299,774.80		
Capital Items Fire Total 6510					$299,774.80
Capital Items EMS 6520					

LUCAS	$21,020.24	2	$42,040.48	$42,040.48	
Life Packs	$50,690.17	1	$50,690.17	$50,690.17	
			$92,730.65		
Capital Items EMS Total 6520					$92,730.65
Fire Taxable Uniforms 6510-52-15					
CBA Shoe Allowance	$225.00	48	$10,800.00	$10,800.00	
Fire Taxable Uniforms Total 6510-52-15					$10,800.00
Fire Uniforms 6510-52-16					
Uniforms Acct tags, badges, brass Promotions	$377.00	27	$10,179.00	$10,179.00	
SAFER Uniform, Acct tags, badges, brass	$1,845.00	48	$88,560.00	$88,560.00	
CBA Uniform Allowance	$450.00	48	$21,600.00	$21,600.00	
Fire Uniform Total			$120,339.00		$120,339.00
Fire Operating 6510-52					
Helmets Promotion	$480.00	27	$12,960.00	$12,960.00	
SAFER PPE/Bunker Gear, misc items	$7,835.00	48	$376,080.00	$376,080.00	
lockers	$464.00	48	$22,272.00	$22,272.00	
Dinner table/Chairs	$1,000.00	1	$1,000.00	$1,000.00	
Beds/ Matresses	$928.00	16	$14,848.00	$14,848.00	
SCBA Bottles	$1,358.95	54	$73,383.30	$73,383.30	
RIT Pack	$3,627.50	1	$3,627.50	$3,627.50	
Gear Grid 6 pack	$2,276.00	8	$18,208.00	$18,208.00	
MDTs	$4,000.00	6	$24,000.00	$24,000.00	
Stocking E36 (non Capital)	$97,000.00	0	$0.00	$0.00	
Furnishing Temp Station	$60,000.00	1	$60,000.00	$60,000.00	
Training Supplies	$5,000.00	1	$5,000.00	$5,000.00	
Fire Operating Total			$611,378.80		$611,378.80
EMS Operating 6520-52					
Stockin R36 & R37 (non Capital)	$26,484.00	1	$26,484.00	$26,484.00	
EMS Operating Total 6520					$26,484.00

Communications 6510-41-00					
Cell Service $484 annual	$484.00	6	$2,904.00	$2,904.00	
MDT Access $ 420 Annual	$420.00	6	$2,520.00	$2,520.00	
Communications Total			$5,424		$5,424
Fire Prof Services/Medical 6510-31					
Physicals	$865.00	48	$41,520.00	$41,520.00	
New Hire Testing	$80.00	150	$12,000.00	$12,000.00	
Temp Station Rental	$180,000.00	1	$180,000.00	$180,000.00	
Fire Prof Services/MedicalTotal 6510			$233,520.00		**$233,520.00**
Maint Contracts 6510-46-01					
Vector/Training RMS	$92.61	48	$4,445.28	$4,445.28	
Vector/Scheduling	$91.79	48	$4,405.92	$4,405.92	
Smarsh	$500.00	1	$500.00	$500.00	
Maint Contracts Total 6510-46-01			**$9,351.20**		**$9,351.20**
Professional Services 6520-31-00					
Vehicle ACLS Sticker (6)	$25.00	4	$100.00	$100.00	
DL Checks = $13 *2	$26.00	48	$1,248.00	$1,248.00	
Professional Services Total 65200			**$1,348.00**		**$1,348.00**
Training 6520-55					
ACLS/BLS Recerts	$4,680.00	1	$4,680.00	$4,680.00	
Paramedic Contract Buy out	$9,500.00	24	$228,000.00	$228,000.00	
Training Total 6520			**$232,680.00**		**$232,680.00**
TOTAL SAFER BA prior to Federal Funding					**$3,517,101.59**

CITY OF ST. CLOUD
BUDGET AMENDMENT
REQUEST

BUDGET AMENDMENT #: 1 **DATE:** 10/20/25
FUND #: 001 **DEPARTMENT:** Fire

Reason/Justification for requested amendment:

For the purchase of a Fire Rescue boat. A grant of $170,000 from the Division of State Fire Marshall is being utilized with the remainder coming from prior year fund balance.

Recommended Funding Source	Amount	Account Number (Finance will complete)
Prior Year Fund Balance:	$340,000	001-0000-301-00-00
Revenue:	$170,000	001-0000-334-65-00
Revenue:		
Revenue:		

Expenditure Accounts Additions Requested:

ACCOUNT NUMBER	ACCOUNT NAME	PROJECT	AMOUNT
001-6510-522-64-00	Machinery & Equipment		$510,000

DEPARTMENT HEAD

DIRECTOR OF FINANCE

CITY MANAGER

DIVISION OF
STATE FIRE MARSHAL
FLORIDA DEPARTMENT OF FINANCIAL SERVICES

July 1, 2025

SENT VIA ELECTRONIC MAIL ONLY

City of St Cloud
abismael.abreu@stcloudfl.gov

Re: Notice of Grant Award for St Cloud Fire Rescue Boat

City of St Cloud:

As the Director of the Division of State Fire Marshal within the Florida Department of Financial Services (Division), it is my privilege to inform you that the 2025 Florida Legislature appropriated funds to support your requested equipment purchase.

This correspondence serves as the notice of the grant award in the amount of $170,000.00. These grant award funds may be available for distribution to you as early as July 1, 2025, once the appropriate requirements are met.

First, you must complete and email the included Confirmation Form to **SFMGrant@MyFloridaCFO.com**. Once the Division receives the completed form, an assigned contract manager will schedule an initial meeting with the Point of Contact listed in the Confirmation Form to discuss the scope of the project and next steps. The assigned contract manager will be the main point of contact within the Division for all matters relating to this notice of grant award, the grant award funds agreement, and the reimbursement of funds.

Please note, the defined performance period for the grant is one (1) year starting July 1, 2025, and ending June 30, 2026. If your equipment purchase will take longer than one (1) year to complete and meet reimbursement requirements, you must notify your assigned contract manager as soon as possible. Additionally, if you do not meet the one (1) year requirement, you may need to resubmit your Local Initiative Funding Request Form or Appropriations Project Request Form to the appropriate local parties.

Congratulations, I look forward to working with City of St Cloud on this important project.

Sincerely,

JoAnne E. Rice, Director
Division of State Fire Marshal

LT/ct

DIVISION OF

STATE FIRE MARSHAL

FLORIDA DEPARTMENT OF FINANCIAL SERVICES

CONFIRMATION FORM

Contact Information

Grantee:	City of St Cloud *(The Grantee name MUST be the name registered with the Department of State and MyFloridaMarketplace, commonly known as MFMP)*
Federal ID # (FEIN):	
Mailing Address:	
City, State, Zip:	
Physical Address:	
City, State, Zip:	

Financial Administrator

Name:	
Title:	
Phone:	
Email:	

Contract Manager

Name:	
Title:	
Phone:	
Email:	

All email and phone communications will be directed to the Point of Contact (POC). Please list POC here:

Name:	
Title:	
Phone:	
Email:	

Jeffrey Cooper

From: Matthew B. Ganoe <mganoe@purvisgray.com>
Sent: Monday, July 7, 2025 3:26 PM
To: Jeffrey Cooper
Cc: Tawny Bailey; Suzette Cover; Mark Gumula II
Subject: RE: City of St. Cloud Award Notification

Good afternoon,

See below please let me know if you have any questions

1. I don't believe the $170,000 grant proceeds should be recorded in Fund 140 unless they are directly related to the CDBG grant program. Therefore, that revenue should be recognized in the applicable fund, which would likely be either the General Fund or a separate Special Revenue Fund, if applicable. If the cash is received in advance of the related expenditure being incurred, and there are still conditions to be met, it would typically be recorded as unearned revenue until those conditions are satisfied.
2. The capital outlay expenditures would be recognized in the respective funds from which the payments are made. So, I would expect the portion from this new grant fund to be recorded there, and the portion from Fund 140 to be recorded in Fund 140.
3. Typically, grant revenue is recognized when all conditions or eligibility requirements are met. For expense reimbursement grants, this is generally when the expense is incurred.

We can always discuss further when we come out for interim fieldwork.

Matthew B. Ganoe, CPA
Audit Director

2347 SE 17th Street
Ocala, FL 34471

mganoe@purvisgray.com
Office: 352.732.3872
Direct: 352.509.3770

PURVIS GRAY
AN INDEPENDENT MEMBER OF BDO ALLIANCE USA
purvisgray.com

From: Jeffrey Cooper <jeffrey.cooper@stcloudfl.gov>
Sent: Monday, July 7, 2025 2:29 PM
To: Matthew B. Ganoe <mganoe@purvisgray.com>
Cc: Tawny Bailey <tawny.bailey@stcloudfl.gov>; Suzette Cover <Suzette.Cover@stcloudfl.gov>; Mark Gumula II <Mark.GumulaII@stcloudfl.gov>; Jeffrey Cooper <jeffrey.cooper@stcloudfl.gov>
Subject: FW: City of St. Cloud Award Notification

Good afternoon Matt,

We have been awarded a $170,000 grant towards the purchase of a Fire Rescue Boat ($400,000+ total cost). The remaining funds are coming from Fund 140 Community Development Block Grants. We are

25 COURAGEOUS FIRE BOAT – Small Pump Option

SPECIFICATIONS AND QUOTE

SUBMITTED BY:

METAL SHARK
METALSHARKBOATS.COM

Gravois Aluminum Boats d.b.a. Metal Shark
6814 E. Admiral Doyle Drive
Jeanerette LA, 70544

ORIGINAL

METAL SHARK
METALSHARKBOATS.COM

October 14, 2025

RE: 25 Courageous Fire Boat

Dear Chief Miller,

Metal Shark is pleased to provide the enclosed Specifications and Pricing information for the 25 Courageous Fire Boat.

Metal Shark appreciates this opportunity and we look forward to any questions, comments or Clarifications you may require.

Warm Regards,

Dean Jones
VP of Sales – LE, Fire/Rescue, & Specialty Projects | Metal Shark Cell: (561) 909-9788
Office: (337) 364-0777
Email: djones@metalsharkboats.com

General Information

Company Contact for Project

Dean Jones VP
of Sales
160 Boro Lan
Franklin, LA 70538
(561) 909-9788
djones@metalsharkboats.com

Availability Overview

Metal Shark takes great pride in the depth of engineering expertise and demonstrated success designing and constructing high-performance, V-bottom vessels and is pleased to bring that experience to the MassPort Fire Department. The proposed vessel is aa well performing parent craft hull design, with an exceptional ride. The designed hull is in service across the Globe. The 27 Courageous as well as all Metal Shark Products are available via GSA, COOP, TEXMAS HGAC, multiple State Contracts as well as commercially and Internationally.

Pricing Structure

GSA Contract: GS-07F-0362T

STANDARD PAYMENT TERMS

- NET 30

DETAILED BUILD SCOPE OF WORK SPECIFICATIONS

25 Courageous BASE BOAT:

- 25' Welded aluminum center console deep vee response monohull boat
- Length: 25' + Appendages, Beam 8'6", Draft: 24 inches with engines trimmed down
- Deep vee hull with outer chines and lifting strakes
- Traditional offshore reverse hull chines
- Includes lifting strakes on hull bottom
- All welded 5086 Aluminum Alloy (5052 is not acceptable)
- Hull, Sides, Stringers & Bulkheads: ¼" & 3/16"
- Keel: 3/8"
- Deck and Console/Ttop: 3/16"
- Transom: 3/8"
- 110 Gallon Removable Fuel Tank
- Bow eye integrated as part of keel
- Integrated motor bracket
- High Volume scuppers with aft drainage
- Flush Mount Electric Horn
- (2) Cupholders

PROPULSION:

- Twin Mercury 4 Stroke 200HP Digital Engines
  - RH and LH Rotation
- DTS Digital Controls and SmartCraft Gauges Package with Fly by Wire Operation
- Power Steering
- (2) Fuel Water Separators
- Stainless Steel Wheel w/ Knob
- Stainless Steel props
  - Pitch TBD to maximize performance
- Electric Trim Tabs w/ LED Indicators
- Installation, Testing and Initial Break-In

ACCOMMODATIONS:

- Center Console w/ Aluminum Ttop
  - 3-Sided Glass T-top
  - Ttop top canopy to include welded rain channels port and starboard
  - Top to include camber for proper Water Channel drainage
  - Overhead red/white switchable at dash lights
  - Canopy to be supported via aluminum piping tied to leaning post bulkhead
  - Forward Console Seat w/ Storage – DELETED for Fire Pump Placement
  - (2) Overhead Fans
- Large Dash with Overhead Radio Pod
  - Interior areas to be coated in matte black to eliminate sun reflection
  - Console dash to include a Neoprene pad
- Safety grab rails in on console and ttop
- Leaning Post and Storage bulkhead w/ Folding Bolster and Backrest Seat
  - Fabric color to be determined by agency
- Self-parking Windshield Wiper and washer
- Folding radar arch

COATINGS & MARKINGS:

- Bottom Anti-Fouling Paint
  - Color: Black
- Hull, Deck, and Console Paint
  - Color TBD by Customer
- Lettering and Striping Package
  - Colors and Lettering TBD by Customer
- EVA Foam Non-Skid
  - Break-Up Pattern
  - Gunnels and forward Deck
  - Color and Grit Level to Be Determined by Customer
- Complete Placard Label Kit for vessel accessories and Options

HULL FENDERING SYSTEM:

- Heavy Duty Extruded Rub Rail
- Mechanically Fastened
- Anti-fouling paint preparation behind rub rail

HULL AND DECK FEATURES AND ACCESSORIES

- Low level Courtesy Lights
  - (6) Lights
  - Red
- Oversized cable raceway w/ pull cords
- Expanding Foam Flotation Below Decks w/ Open bilge
- Bow Anchor Locker
- Stainless Steel Hardware and Latches
  - Isolated using tef-gel and isolating inserts
- Self-bailing deck w/ Guttered Hatch Drains
- (6) cast welded aluminum cleats 10"
- Bow bitt
- Anodes
- (2) 2000 Bilge pumps
- Tow post
  - Aluminum w/ Aluminum Cross Pin
- Engine Protection Bar
- Dive Ladder
- Custom Grab Rail package
  - Location/Layout TBD
- (4) Recessed Tie Downs
- Bilge Alarm
- Bow Push Knees
- (2) Full Height Dive Door
- Hull Side Strakes

ELECTRICAL AND LIGHTING:

- Battery system for three isolated battery banks
- Four Optima Blue Top Batteries
  - (2) Dedicated Engine Start Batteries
    - (1) Per Engine

    - (2) House Battery
- (6) Flush Mount LED Whelen Emergency Lights
    - Customer to Determine Color
- (2) Duplex 12 Volt/USB receptacle
- Electronics Distribution Panels
- Custom Blue Seas Breaker System Designed Specifically for this platform by use of an ELA
    - All wiring must be custom made
    - All wiring must have fully terminated terminals with heat shrink labels on both ends
    - All wiring must have minimum of 1" service loop on both ends
    - Galvanic Isolator
    - Photographic Evidence of Wiring Examples to be included
- Dimmer Switch Panel Lights & Compass
- Shore Power, Battery Charger and Cord Package
- (4) Floodlights
    - Lumitech LED
- (2) 10" RIGID Scene/Flood Lights
- Diamond Switch Panel
- LED navigation lights
- (1) LED Go Spot Light

ELECTONICS & NAVIGATION

- Raymarine AXION Pro +: (2) 12" Touch MFD Display, GPS Antenna, Heading Sensor, and Dual Through Hull Transducers
- (1) ICOM510 VHF w/ Antenna
- Compass, Upgraded Dimmable – Ritchie Navigator or Equivalent
- Whelen WPA3 Siren, Controller, and Hailer
- FLIR M332
- Sionyx NV Camera

FIRE FIGHTING:

- Darley 2BE21 or 2BE23 Fire Pump and Engine Combo
    - Optional based on desired Flow/Pressure Ratings
        - Roughly 110GPM – 300GPM @ 110PSI
- Start Stop Panel
- Plumbed Sea Chest w/ Valve
- Under Deck Piping
- Manual Monitor
- (2) 2.5" Discharges

OUTFITTING:

- (3) Fire Extinguisher
    - Includes Mount
- (1) Removable Flag Mast
- (4) Dive Tank Holders
- (2) 12' Minn Kota Talon Anchors

TRAILER:

- Light Commercial Duty Aluminum I-Beam Trailer
    - BRAND: AMERITRAIL

- LED Lights
- Dual Torsion Axles
- Brakers
- Ladder
- Spare Tire w/ Rim and Mount
- Carpeted bunks
- Tie Down Straps

DELIVERY AND SEA TRIALS:

- Shrink Wrap
- Delivered to Customer Location (Florida)
- Full Basic Drawings of Vessel and all systems
- All Vessel and Component Documentation Package
- Sea Trials Encouraged, but not required

WARRANTY

- 10 year hull and structure
- 1 year bow to stern
- Full Warranty Statement must be included with proposal
- Mercury Engine Warranty: 3 Year
- Major Electronics Warranty: 2 Year
- Trailer Warranty: 2 Year
- Collar Warranty: 2 Year

PRICE QUOTE

- 25 Courageous Package: $504,992.95
  - Pricing is GSA on Contract GS-07F-0362T

ST. CLOUD FIRE RESCUE

Customer Signature: _____

Customer Name: _____

Customer Title: _____

Date: _____

METAL SHARK BOATS

Authorized Signature: _____

Authorized Name: _____

Authorized Title: _____

Date: _____

CITY OF ST. CLOUD
BUDGET AMENDMENT REQUEST

BUDGET AMENDMENT #: 1
FUND #: 120

DATE: 10/06/25
DEPARTMENT: Police

Reason/Justification for requested amendment:

Funding to replace two Police vehicles that are currently being leased. It has been determined that purchase is financially more prudent than leasing over the long term.

Recommended Funding Source	Amount	Account Number (Finance will complete)
Prior Year Fund Balance:	$180,000	120-0000-301-00-00
Revenue:		
Revenue:		
Revenue:		

Expenditure Accounts Additions Requested:

ACCOUNT NUMBER	ACCOUNT NAME	PROJECT	AMOUNT
120-6010-521-64-00	Machinery & Equipment		$180,000

DEPARTMENT HEAD

DIRECTOR OF FINANCE

CITY MANAGER

CITY OF ST. CLOUD
BUDGET AMENDMENT
REQUEST

BUDGET AMENDMENT #: 1
FUND #: 120

DATE: 10/20/25
DEPARTMENT: PW - Building Maintenance

Reason/Justification for requested amendment:

For the Civic Center - Gym A window replacement.

Recommended Funding Source	Amount	Account Number (Finance will complete)
Prior Year Fund Balance:	$200,000	120-0000-301-00-00
Revenue:		
Revenue:		

Expenditure Accounts Additions Requested:

ACCOUNT NUMBER	ACCOUNT NAME	PROJECT	AMOUNT
120-7080-519-62-00	Buildings		$200,000

DEPARTMENT HEAD

DIRECTOR OF FINANCE

CITY MANAGER

CITY OF ST. CLOUD
BUDGET AMENDMENT
REQUEST

BUDGET AMENDMENT #: 1
FUND #: 300

DATE: 09/29/25
DEPARTMENT: Parks & Recreation

Reason/Justification for requested amendment:

To recognize the contribution from Osceola County for project PR2303 Partin Triangle Park.

Recommended Funding Source	Amount	Account Number (Finance will complete)
Prior Year Fund Balance:		
Revenue:	300-0000-369-90-00	$404,791
Revenue:		
Revenue:		

Expenditure Accounts Additions Requested:

ACCOUNT NUMBER	ACCOUNT NAME	PROJECT	AMOUNT
300-9595-572-63-00	Other Improvements	PR2303	404,791

Stephanie Holtkamp
DEPARTMENT HEAD

DIRECTOR OF FINANCE

CITY MANAGER

CITY OF ST. CLOUD
BUDGET AMENDMENT REQUEST

BUDGET AMENDMENT #: 1
FUND #: 120/300

DATE: 09/29/25
DEPARTMENT: Public Works

Reason/Justification for requested amendment:

To fund project PW2601 City Hall Security Enhancements

Recommended Funding Source	Amount	Account Number (Finance will complete)
Prior Year Fund Balance:	120-0000-301-00-00	$250,000
Revenue:	300-0000-381-12-00	$250,000
Revenue:		
Revenue:		

Expenditure Accounts Additions Requested:

ACCOUNT NUMBER	ACCOUNT NAME	PROJECT	AMOUNT
120-9020-581-91-30	Intragovernment Transfers		250,000
300-9595-519-62-00	Buildings	PW2601	250,000

Kevin Felblinger
Kevin Felblinger (Sep 29, 2025 15:55:13 EDT)
DEPARTMENT HEAD

DIRECTOR OF FINANCE

CITY MANAGER

CAPITAL IMPROVEMENTS PROGRAM PROJECT REQUEST

		Initiation Year:		2026	
Date Submitted:	9/29/2025	Finance PRJ/No.:		PW2601	
Submitting Dept./Division:	Public Works	P/N Data Entry--By/			
Submitting Dept. File No.:			Date:		
Original Budget Year:	FY 2025/2026				
Year Projected Expected to be In Service:	2026	Payroll Data Entry By/			
Fund /Dept-Div/ Activity:	300-9595-519		Date:		
Adopted by Resolution #					
Adopted @ Council Mtg.:					
1.) Project Title:	City Hall Security Enhancements				
a. Project included in the Comprehensive Plan?:		Yes	X	No	
b. If NOT in Comp Plan, Priority of Proj:	Priority Ranking:				
c. Is it in the Department CIP or the Comp Plan?		Dept CIP	X	Comp Plan	

2.) Full Description of Project:
Security enchancements for City Hall which may include solid wood doors, security door hardware, and other items to improve City Hall security.

3.) ESTIMATED COST TO BUILD THIS PROJECT/PROGRAM/SYSTEM

Element #		Element description	Projected Cost
12-00		SALARIES & WAGES	
14-00		OVERTIME	
31-00		PROFESSIONAL SRVC (Engineering, Architectural, Legal)	
34-00		OTHER CONTRACTUAL SERV(Custodial, janitorial,& other srvcs)	
49-53.00		OTHER CURRENT, OFF. SUPP, OPER. SUPP, (Year 1 costs)	
61-00		LAND & RIGHT OF WAYS	
62-00		BUILDINGS	$250,000
63-00		C/O OTHER IMPROVEMENTS	
64-00		MACHINERY & EQUIPMENT	
		TOTAL CONSTRUCTION COST	**$250,000**

4.) Calendar Of Expenditures for **Cash Flow** Projections (For Multi-Year Projects Only)
(Indicate amount requested by year and for what stage of project it is requested).

MONTH/YEAR	AMOUNT	PROJ. PHASE (PLAN, DESIGN, CONST.)
2025/2026	$250,000	Purchase/Installation

5.) **SOURCE OF FUNDS**

	TOTAL
One Percent Surcharge Fund	$250,000
TOTAL	**$250,000**

NOTE: ATTACH ALL AGREEMENTS, EXPLANATIONS, JUSTIFICATIONS, SERVICE AREA MAPS, PLANS, ETC.

REQUESTED BY: Kevin Felblinger 09/30/25
Kevin Felblinger (Sep 30, 2025 07:12 EDT)
(Department Head) (Date)

APPROVED BY: 9/30/25
(Finance Director) (Date)

ESTIMATED BY: (Date)

(City Manager) (Date)

CITY OF ST. CLOUD
BUDGET AMENDMENT
REQUEST

BUDGET AMENDMENT #: 1
FUND #: 300/320

DATE: 09/23/25
DEPARTMENT: Parks & Recreation

Reason/Justification for requested amendment:

To establish project PR2603 Centennial Park Restroom which is replacing project CR2402 Centennial Park Renovations as the funding source is being changed from CRA to Parks Impact Fees.

Recommended Funding Source	Amount	Account Number (Finance will complete)
Prior Year Fund Balance:	320-0000-301-00-00	$601,580
Revenue:	300-0000-381-64-50	$601,580
Revenue:		
Revenue:		

Expenditure Accounts Additions Requested:

ACCOUNT NUMBER	ACCOUNT NAME	PROJECT	AMOUNT
300-9595-572-62-00	Buildings	PR2603	$601,580
320-9595-572-91-30	Intragovernment Transfers, Capital Proj		$601,580

9/23/25
DEPARTMENT HEAD

DIRECTOR OF FINANCE

CITY MANAGER

CAPITAL IMPROVEMENTS PROGRAM PROJECT REQUEST

			Initiation Year:		2026
Date Submitted:	9/23/2025		Finance PRJ/No.:		PR2603
Submitting Dept./Division:	Parks & Recreation		P/N Data Entry--By/		
Submitting Dept. File No.:				Date:	
Original Budget Year:	FY 2025/2026				
Year Projected Expected to be In Service:	2026		Payroll Data Entry By/		
Fund /Dept-Div/ Activity:	300-9595-572			Date:	
Adopted by Resolution #					
Adopted @ Council Mtg.:					
1.) Project Title:	Centennial Park Restroom				
a. Project included in the Comprehensive Plan?:			Yes	X	No
b. If NOT in Comp Plan, Priority of Proj:	Priority Ranking:				
c. Is it in the Department CIP or the Comp Plan?			Dept CIP	X	Comp Plan

2.) Full Description of Project:
To construct a public restroom facility for Centennial Park.

3.) ESTIMATED COST TO BUILD THIS PROJECT/PROGRAM/SYSTEM

Element #		Element description	Projected Cost
12-00		SALARIES & WAGES	
14-00		OVERTIME	
31-00		PROFESSIONAL SRVC (Engineering, Architectural, Legal)	
34-00		OTHER CONTRACTUAL SERV(Custodial, janitorial,& other srvcs)	
49-53.00		OTHER CURRENT, OFF. SUPP, OPER. SUPP, (Year 1 costs)	
61-00		LAND & RIGHT OF WAYS	
62-00		BUILDINGS	$601,580
63-00		C/O OTHER IMPROVEMENTS	
64-00		MACHINERY & EQUIPMENT	
		TOTAL CONSTRUCTION COST	**$601,580**

4.) Calendar Of Expenditures for **Cash Flow** Projections (For Multi-Year Projects Only)
(Indicate amount requested by year and for what stage of project it is requested).

MONTH/YEAR	AMOUNT	PROJ. PHASE (PLAN, DESIGN, CONST.)
2025/2026	$601,580	Design & Construction

5.) **SOURCE OF FUNDS**

	TOTAL
Parks Impact Fees	$601,580
TOTAL	**$601,580**

NOTE: ATTACH ALL AGREEMENTS, EXPLANATIONS, JUSTIFICATIONS, SERVICE AREA MAPS, PLANS, ETC.

REQUESTED BY:
Stephanie Hoffman 9/23/25
(Department Head) (Date)

ESTIMATED BY: (Date)

APPROVED BY:
[signature] 9/23/25
(Finance Director) (Date)

[signature]
(City Manager) (Date)

CITY OF ST. CLOUD
BUDGET AMENDMENT REQUEST

BUDGET AMENDMENT #: 1
FUND #: 330

DATE: 09/23/25
DEPARTMENT: Police

Reason/Justification for requested amendment:

One additional Police Officer position for the Lakefront area has been added. This will cover their vehicle, emergency lighting, radios, laptops, and other emergency equipment.

Recommended Funding Source	Amount	Account Number (Finance will complete)
Prior Year Fund Balance:	330-0000-301-00-00	$120,600
Revenue:		
Revenue:		
Revenue:		

Expenditure Accounts Additions Requested:

ACCOUNT NUMBER	ACCOUNT NAME	PROJECT	AMOUNT
330-6010-521-52-00	Operating Supplies		$50,200
330-6010-521-64-00	Machinery & Equipment		$70,400

DEPARTMENT HEAD

DIRECTOR OF FINANCE

CITY MANAGER

CITY OF ST. CLOUD
BUDGET AMENDMENT
REQUEST

BUDGET AMENDMENT #: 1 **DATE:** 10/21/25
FUND #: 460 **DEPARTMENT:** Building Permits

Reason/Justification for requested amendment:

For the implementation of a relay web permitting application and upgrade of plan review software.

Recommended Funding Source	Amount	Account Number (Finance will complete)
Prior Year Fund Balance:	$283,780	460-0000-301-00-00
Revenue:		
Revenue:		
Revenue:		

Expenditure Accounts Additions Requested:

ACCOUNT NUMBER	ACCOUNT NAME	PROJECT	AMOUNT
460-5510-515-31-00	Professional Services		$211,050
460-5510-515-46-01	Maintenance Contracts		$55,755
460-5510-515-55-00	Training		$16,975

Bob Deatherage (Oct 22, 2025 07:12:38 EDT)
DEPARTMENT HEAD

DIRECTOR OF FINANCE

CITY MANAGER

Jeffrey Cooper

From: Cristina Soto
Sent: Monday, October 20, 2025 1:13 PM
To: Jeffrey Cooper
Cc: Bob Deatherage; Ana Hawkins; Mark Gumula II; Scott Davidoff; Roberto Smith
Subject: BA Submission for November – Building Plan Review Software & Digital Application Portal
Attachments: Quote_St. Cloud FL - Premium Bundle.pdf; St. Cloud Relay Web Permitting Draft (Single Dynamic Permit Type) v5.pdf

Importance: High

Good Afternoon Jeff,

I wanted to share the information regarding the Budget Adjustment (BA) scheduled for November. While we previously discussed some of the details, below is a summary of the request, along with the formal quotes attached for your review. Please let me know if you have any questions or need additional information.

Account: 460-5510-515-46-01
Amount: $99,130.00
Purpose: Upgrade of Plan Review Software from Bluebeam to Avolv Project Docs

Benefit to the Department and City:
This software upgrade will integrate seamlessly with both TrakiT and Laserfiche, significantly improving our current workflow. Currently, staff must manually process plan reviews to deliver approved, stamped plans to customers. The upgraded system will automate much of this process, saving staff time and increasing efficiency for our plan reviewers.

Additionally, this software is already in use by the Community Development Department, which will help streamline internal processes and provide consistency across departments. From an IT perspective, this consolidation also reduces the number of systems needing support and maintenance.

Account: 460-5510-515-46-01
Amount: $184,650 Implementation (the quote shows what the annual cost after implementation will be over the next 5 years)
Purpose: Implementation of a Digital Customer Application Portal for Permits with Selectron

Benefit to the Department and City:
Currently, the Building Department uses the City's website to receive digital building permit applications. This system offers limited functionality and **does not** integrate with TrakiT, resulting in additional manual data entry. It also imposes document size restrictions, leading to customer frustration and forcing staff to develop alternative methods for permit submission.

The proposed portal will fully integrate with TrakiT, improving data accuracy and reducing processing time. It will also enhance the customer experience by consolidating all permit-related functions into a single platform. New and improved features will include:

- Online permit application
- Viewing permit history
- Online payments
- Scheduling inspections
- Accessing plan review and inspection comments

This one-stop-shop approach will greatly streamline both internal operations and the customer interface.

Total Requested in Account 460-5510-515-46-01: $283,780.00

Please review the attached quotes and let me know if you have any questions or need further clarification.

Cristina Soto, CBO, CPM
IAS Accredited Building Department
Deputy Director of Administration & Technical Services
1300 9th Street
St. Cloud, FL 34769
P: 407-957-8421
cristina.soto@stcloudfl.gov
www.StCloudFL.gov

Click HERE to subscribe to the Building Departments news updates and Quarterly Meetings.

"This email may contain content generated with the assistance of AI."

St. Cloud, FL

ProjectDox® ePlan Proposal

Prepared by your Avolve Software Representative

Alec Johnson

21001 N Tatum Blvd, Ste 1630-503
Phoenix, AZ 85050
www.avolvesoftware.com

Telephone: 801-750-2158
Email: ajohnson@avolvesoftware.com

avolve

Quote Delivered To:

,

St. Cloud, FL

Dated: 10/16/2025

Expiration Date: 10/31/2025

ePlan Life Cycle Solution Pricing

SaaS

Product Name	Product Code	Description	QTY	Unit Price	Total Price
Production Environment Entry-Level Capacity ProjectDox SaaS License	SAAS.P DOX-P.E	Software as a Service (SaaS) for ProjectDox on a Production Environment. Software included for Production: • ProjectDox Software Subscription • Unlimited Workflow license Services included for SaaS Production: • Set up and installation of ProjectDox • Managed services • Annual ProjectDox upgrades • Premium Bundle Access Production Environment Safeguard: Avolve security policy limits access to the Production environment. External users including the customer's IT will not be allowed direct access to the Production servers and database. Any development or testing can be performed on the Test environment. This will be the price for 45 total licenses	45.00	$1,850.00	Annual: $83,250.00

Subtotal SaaS : **$83,250.00**

SaaS Services

Product Name	Product Code	Description	QTY	Unit Price	Total Price
Foundation Training Subscription 350 – Avolve Training Library	SUB.TES-FT350	Training Subscription provides self-paced fundamental role-based training for the Plan Reviewer, Process Management, and Administration for ProjectDox.	24.00	$350.00	$5,000.00
				SaaS Services Total:	**$5,000.00**

Professional Services

Product Name	Product Code	Description	QTY	Unit Price	Total Price
Professional Services	PS-225	Professional Services time for Services – Premium Features	6.00	$225.00	$1,350.00
Best-in-Class Level 1 ProjectFlow PLUS Services	PS-BIC.L1PLUS	BIC Plus Setup Services Level 1 for Workflows:	1.00	$30,600.00	$30,600.00
SaaS TrakIT Integration Services	PS-225	Avolve configuration services to implement the SaaS TrakIT integration for a maximum of 2 environments (Test & Production). The integration setup and configuration should not exceed 8 hours. Additional hours can be purchased as needed.	24.00	$225.00	$5,400.00
SaaS Laserfiche Integration Services	PS-SaaS-LF-API.INT	Avolve and Laserfiche integration Services with ProjectDox for maximum 2 environments Base Integration for Laserfiche using API: Automated export of the approved and stamped plans/documents to a single Laserfiche repository.	1.00	$4,050.00	$4,050.00

		Maximum 10 metadata fields Time and Materials not to exceed 18 hours			

Professional Services Total: $41,400.00

Training

Product Name	Product Code	Description	QTY	Unit Price	Total Price
ProjectDox Tier 4 Training	PKG-PDOX 4 TRN	Implementation Training Package Includes: • 1:Introduction to ProjectDox • 1: Introduction to Marking Up in ProjectDox • 1: Workflow Business Process Training for Plan Reviewers • 1: Workflow Business Process Training for Coordinating Staff • 1: Pilot Workshop Class • 1: Community Outreach Class • 1: Project Administration Class • 1: System Administration Class	1	$15,400.00	$15,400.00
Professional Services	PS-225	Professional Services time for Training – Premium Features	7.00	$225.00	$1,575.00

SaaS Services Total: $16,975.00

100% of SaaS and Subscriptions shall be invoiced upon execution of Agreement. Services will be billed monthly on a Time and Material Basis. Payment for the remaining amount is due net thirty days (30) from invoice after work has occurred. Payment via EFT. **Travel and Expenses are not included in this total and will be invoiced as incurred.**	SaaS Renewal:	$83,250.00
	Current SaaS Subscription	($47,495.00)
	Services:	$41,400.00
	SaaS Services:	$5,000.00
	Training:	$16,975.00
	Total Year One Solution Cost:	**$99,130.00**

	Pro-rated amount due upon signature	**$66,959.00**

Next Year Total Cost (1/16/2026 – 1/15/2027) : $88,250

COMPANY SIGNATURE:

DATE:

CUSTOMER SIGNATURE:

DATE:

Selectron TECHNOLOGIES, INC

Quote EE7347B
10/20/2025
Quote Expires on 01/18/2026

City of St. Cloud, FL

Relay Web Permitting Application

Professional Services

Description	Qty	Unit Price	Total
Relay Web Platform Setup - Permitting Appplication			
Project Management	130	$225.00	$29,250.00
Development & Integration - CentralSquare TRAKiT	560	$225.00	$126,000.00
QA Testing & Training	64	$225.00	$14,400.00
Analyst (Single Dynamic Permit Type)	20	$225.00	$4,500.00
Single Dynamic Permit Type Included			-$4,500.00
Relay Web Platform Enhancements - Permitting Application			
Apply for a New Permit (Single Dynamic Permit Type)	1	$3,000.00	$3,000.00
Single Dynamic Permit Type Included			-$3,000.00
PROFESSIONAL SERVICES TOTAL			**$169,650.00**

Annual Hosted Platform and Application Fees

Description	Qty	Unit Price	Total
Relay Web Platform - Permitting Application	1	$50,000.00	$50,000.00
Integration Support			
Application Hosting			
Advanced Website Security & Bot Mitigation			
Payments			
Apply for a New Permit (Single Dynamic Permit Type)	1	$1,200.00	$1,200.00
Single Dynamic Permit Type Included			-$1,200.00
Five-Year Commitment Discount*			-$35,000.00
ANNUAL FEES TOTAL			**$15,000.00**

Five-Year Commitment Summary

	Year 1	Year 2	Year 3	Year 4	Year 5
PROFESSIONAL SERVICES	$169,650.00				
ANNUAL FEES TOTAL	$15,000.00	$15,000.00	$15,000.00	$15,000.00	$15,000.00
TOTAL	**$184,650.00**	**$15,000.00**	**$15,000.00**	**$15,000.00**	**$15,000.00**

5-Year Total: $244,650.00

Single Dynamic Permit Type:

- Selectron will implement a dynamic permit application flow for a single permit type mutually agreed upon between Selectron and the client
- Future dynamic permit types requested by the client will be scoped and quoted individually

*Requires all other Selectron-provided solutions are retained for duration of five-year commitment

MANAGED SERVICES APPLICATION SCOPE AND ASSUMPTIONS

Application Database Integration:

Integration to CentralSquare - TRAKiT requires specific network access as determined necessary during the system implementation. All functionality provided above is based on the customer provided API providing access to all data. Changes to Selectron utilized API's require notification. Technology changes or migration to a new interface type may require additional services.

Relay Web – Permitting Application:

The web solution provides users with a point of access for applying for permits and paying permit related fees. The scope for this solution includes configuration of fifty-three (53) static permit application pages and one (1) dynamic application page.

Static application page: series of form fields that the user fills out and then submits. Simple workflow with no dynamic field changes.
Dynamic application page: series of form fields that dynamically change based on the users' selections within the form. Complex workflow and more significant development work.

Apply for a New Permit: This feature guides users through the permit application process, requesting pertinent information and then submitting it for approval by administrative staff.

PRICING & PAYMENT INFORMATION

The contract period begins upon execution. Pricing does not include additional application integration charges that may be required as part of this solution. This includes Application Vendor API, user, or implementation fees, additional licensing fees, or other surcharges directly or indirectly charged by or remitted to the Application Vendor. Pricing above is based on the use of Selectron Technologies standard agreement. All other agreements requiring legal review require a minimum $9,500 additional fee.

PROFESSIONAL SERVICES PAYMENT SCHEDULE

80%	Invoiced at time of execution of contracts
20%	Invoiced upon system available for initial user acceptance testing

TRAVEL FEE PAYMENT SCHEDULE

100%	If travel is identified in the above detail or later requested, all travel and related fees are scheduled in advance including travel days and will be invoiced upon completion. Total travel is invoiced at then current hourly rates, currently $225.00 per person per hour, plus actual travel expenses.

ANNUAL FEES, BUNDLES, AND SUPPORT

100%	Invoiced upon system availability for initial user acceptance testing or 45 days prior to the next renewal for existing services, whichever occurs first. Recurring fees are invoiced 45 days prior to renewal.

In the event the customer terminates agreement prior to the end of the commitment term, 100% of all remaining unpaid fees for the term become immediately due.

CHANGE ORDERS INCLUDING TIME AND MATERIAL RATES

- All service work and/or deliverables not listed, defined, or provided as optional deliverables in this document are considered outside of the scope of this project effort. Out of scope services will be invoiced at Selectron's then current Time and Material rate, currently $225.00 per hour.

- If the out of scope services require a formal change order, the Company and Customer will mutually agree in writing, which will include a scope of work, timeline for delivery, Company and Customer responsibilities and the price terms and conditions. Upon acceptance by Customer and issuance of required purchasing documentation, all Change Orders shall be governed by the terms and conditions of this Agreement, no other terms or conditions shall apply. Customer acknowledges that such Change Orders may affect the implementation schedule and dates otherwise established as part of the project plan.

- If Customer requires additional documentation, services to prepare this documentation will be invoiced at Selectron's then current Time and Material rate, currently $225.00 per hour, 4-hour minimum.

TAXES

Sales Tax or any other applicable taxes are ***not included*** in any of the pricing in this agreement. All applicable taxes will be invoiced, collected and remitted in accordance with state and local tax laws.

PAYMENT TERMS

Terms are net 30 days from date of invoice. Past due invoices are subject to a 1.5% per month late fee. All presented pricing is in US Dollars.

VENDOR INFORMATION

Selectron Technologies, Inc.
13535 SW 72nd Avenue, Suite 200
Portland, OR 97223
Ph: 503.443.1400 Fax: 503.443.2052

Meeting: November 13, 2025

Agenda Item Type: Public Hearings
Ordinance No. 2025-58 - Special Event ordinance

Park & Recreation Agenda Item:
FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-58, an ordinance of the City Council of the City of St. Cloud, Florida, amending the Land Development Code as follows: amending Growth Managmenet Services to read Community Development Department, Article I - Sec. 30-2(A) remove refundable performance bond, Sec. 30-3 add boat ramp hours, 30.4(A) amend dawn to dusk to read sunrise to sunset, Article II - Sec. 30-16 amending Major Special Event definition to Special Event, removing the event cap of 250 people and removing Minor Special Event definition, amending Sec. 30-18(A)(1) to Special Events and removing the cap of 250 people, Sec. 30-18(A)(2) removing Minor Special Events, amending Section 30-18(B) to remove a daily attendance of 250 person or greater, amending Sec. 30-18(C)(1) removing the daily attendance of the event is greater than 250 persons or, amending Sec. 30-19 to remove Minor Special Event, Sec. 30-19(A) Limiting the number of special events within a calendar year and setting reservation requirements, Sec. 30-19(B)(3) setting requirements for who may act on an organization's behalf, 30-19(C) setting payment terms and providing conflict, severability codification and an effective date.(Above is full title) **ACTION ON ORDINANCE NO. 2025-58.**

Strategic Key Focus Areas:
Diverse Innovative and Magnetic Economic Development

Background Information:
The City's Special Event Ordinance was originally designed to regulate events that impact city services, public safety, and the overall health and welfare of residents. Over time, staff identified areas where the ordinance could be simplified, clarified, and modernized to improve efficiency for both event organizers and city staff.

- **Administrative Updates**
    1. Replaces references to "Growth Management Services" with "Community Development Department."
    2. Removes the requirement for a refundable performance bond.
- **Definitions**
    1. Consolidates the definitions of "major" and "minor" special events into a single category of "Special Event."
    2. Removes the attendance cap of 250 people, recognizing that the scale and impact of events should be evaluated based on the overall circumstances rather than a fixed threshold.
- **Permit Requirements**
    1. Updates Section 30-18 to require permits for "Special Events" broadly, without distinguishing between major and minor events.
    2. Clarifies that events on the water and certain business-related events outside

normal operations also require a permit.
3. Adds and establishes clear requirements for recurring events.

- **Application Process and Fees**
  1. Maintains the requirement that applications be filed 60 days prior to an event, but allows the City Manager/designee to waive this requirement if public safety is not compromised.
  2. Allows for up to 12 recurring events per year in the Entertainment District, provided logistics remain consistent.
  3. Specifies that for special events requiring a facility reservation, event dates will not be considered held until both the security deposit and fifty percent (50%) of the rental fees are paid.
  4. Clarifies that while an organization may designate an authorized representative to act on its behalf for the event, all required documentation must be completed and submitted by the organization itself.
  5. Updates the non-refundable application fee requirement to state that the fee is due at the time of submission or within three (3) business days.
  6. Requires that event operation fees be paid in full not later than thirty (30) days prior to the scheduled event date, with the exception of Public Safety fees, which will be billed following the event.

Legal Authority:
City of St. Cloud Charter Chapter 30, Article II

Budget and Recommendation:
No cost associated with this item.
Staff recommends **APPROVAL** of Ordinance 2025-58.

Finance Director's Comments:
N/A

Procurement Director's Comments:
N/A

City Manager's Comments:
City Manager recommends approval

City Council Action:
10/9/25 - Motion by Paul, seconded by Urban, Passed 4-0
11/13/2025 - Final Action

Attachments:
1. 2025-58 - Special Event Ordinance - Staff Report 9-25-25
2. Ordinance 2025-58 (FINAL) 9-24-25
3. Ordinance 2025-58 (mark-up) 9-24-25

MEMORANDUM REPORT
FOR CITY COUNCIL
October 9, 2025

To: Mayor Robertson and Council Members

From: Stephanie Holtkamp, Parks and Recreation Director

Subject: Ordinance No. 2025- 58 (First Reading) / November 13, 2025 (Second Reading)

Date: September 25, 2025

REQUEST:

The purpose of this agenda item is to request City Council approval of Ordinance No. 2025-58, amending the City's Special Event Ordinance (Chapter 30, Parks and Recreation, Article II – Special Events). These amendments update definitions, streamline processes, and remove outdated thresholds and requirements to better reflect the current management of special events in the City.

BACKGROUND:

The City's Special Event Ordinance was originally designed to regulate events that impact city services, public safety, and the overall health and welfare of residents. Over time, staff identified areas where the ordinance could be simplified, clarified, and modernized to improve efficiency for both event organizers and city staff.

Specific changes included in the amendment:

- **Administrative Updates**
  - Replaces references to "Growth Management Services" with "Community Development Department."
  - Removes the requirement for a refundable performance bond.
- **Definitions**
  - Consolidates the definitions of "major" and "minor" special events into a single category of "Special Event."
  - Removes the attendance cap of 250 people, recognizing that the scale and impact of events should be evaluated based on the overall circumstances rather than a fixed threshold.
- **Permit Requirements**
  - Updates Section 30-18 to require permits for "Special Events" broadly, without distinguishing between major and minor events.
  - Clarifies that events on the water and certain business-related events outside normal operations also require a permit.
  - Adds and establishes clear requirements for recurring events.
- **Application Process and Fees**
  - Maintains the requirement that applications be filed 60 days prior to an event, but allows the City Manager/designee to waive this requirement if public safety is not compromised.

- Allows for up to 12 recurring events per year in the Entertainment District, provided logistics remain consistent.
- Specifies that for special events requiring a facility reservation, event dates will not be considered held until both the security deposit and fifty percent (50%) of the rental fees are paid.
- Clarifies that while an organization may designate an authorized representative to act on its behalf for the event, all required documentation must be completed and submitted by the organization itself.
- Updates the non-refundable application fee requirement to state that the fee is due at the time of submission or within three (3) business days.
- Requires that event operation fees be paid in full not later than thirty (30) days prior to the scheduled event date, with the exception of Public Safety fees, which will be billed following the event.

STRATEGIC PLAN GOALS:

Effective Community Safety

Strong collaborations and partnerships with the community

COST:
There is no cost associated with this item.

STAFF RECOMMENDATION:
Staff recommends **APPROVAL** of Ordinance No. 2025-58

Attachment – Ordinance No. 2025-58

ORDINANCE NO. 2025-58

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, AMENDING THE LAND DEVELOPMENT CODE AS FOLLOWS: AMENDING GROWTH MANAGEMENT SERVICES TO READ COMMUNITY DEVELOPMENT DEPARTMENT, ARTICLE I - SEC. 30-2(A) REMOVE REFUNDABLE PERFORMANCE BOND, SEC. 30-3 ADD BOAT RAMP HOURS, 30.4(A) AMEND DAWN TO DUSK TO READ SUNRISE TO SUNSET, ARTICLE II - SEC. 30-16 AMENDING MAJOR SPECIAL EVENT DEFINITION TO SPECIAL EVENT, REMOVING THE EVENT CAP OF 250 PEOPLE AND REMOVING MINOR SPECIAL EVENT DEFINITION, AMENDING SEC. 30-18(A)(1) TO SPECIAL EVENTS AND REMOVING THE CAP OF 250 PEOPLE, SEC. 30-18(A)(2) REMOVING MINOR SPECIAL EVENTS, AMENDING SECTION SEC, 30-18(B) TO REMOVE A DAILY ATTENDANCE OF 250 PERSON OR GREATER, AMENDING SEC. 30—18(C) (1) REMOVING THE DAILY ATTENDANCE OF THE EVENT IS GREATER THAN 250 PERSONS OR, AMENDING SEC. 30-19 TO REMOVE MINOR SPECIAL EVENT, SEC 30-19(A) LIMITING THE NUMBER OF SPECIAL EVENTS WITHIN A CALENDAR YEAR AND SETTING RESERVATION REQUIREMENTS, SEC. 30-19(B)(3) SETTING REQUIREMENTS FOR WHO MAY ACT ON AN ORGANIZATION'S BEHALF, 30-19(C) SETTING PAYMENT TERMS AND PROVIDING CONFLICT, SEVERABILITY, CODIFICATION AND AN EFFECTIVE DATE.

WHEREAS, The City Council recognizes the impact that special events have on the availability of city services and also on the health, safety and welfare of the citizens of the City of St. Cloud, Florida, and

WHEREAS, the permitting, planning and implementation of events on public streets, sidewalks, property and places and certain non-public real property within the City, requires various City staff departments, including the Police, Fire, Public Services, Community Development Department, and Parks and Recreation Departments to collaborate in an effective process to review and approve special events in the best interests of the citizens of St. Cloud.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA:

Section 1. Chapter 30, "Parks and Recreation", Article II "Special Events", Sections 30-19 "Application for Permits" of the Code of the City of St. Cloud, Florida is amended as follows (underline depicts added language; strikethrough depicts deleted):

Article I. In General

Sec. 30-1. - Operation of vehicles in parks, recreational areas, lakefronts and cemeteries. It shall be unlawful for any person to drive or propel any vehicle, or drive any horse or other animal in, over or through any park, recreational area or lakefront area in the city except along and upon park drives, parkways and park boulevards, or for any person to ride any bicycle, tricycle or toy vehicles through any park except along and upon the park drives, parkways, park boulevards and upon paths set apart and designated as bicycle paths, except when, with the approval of the city manager and after a special event permit as required in section 30-2 is obtained, a special event is to take place. The city manager may approve the use of recreational vehicles along and upon recreational areas or lakefront areas.

Sec. 30-2. - Special event permit.

(a) Required. A Special Event permit will be required to be issued to the organization or individual sponsoring any special events. The permit fee currently established or as hereafter adopted by resolution of the city council from time to time will be required.
(b) Electrical, sanitation and health requirements. Whenever a permitted special event is held, all electrical, sanitation and health requirements must be met. All recreational vehicles shall be completely self-contained. Failure to meet the specified electrical and health standards will result in the revocation of the permit.

Sec. 30-3. - Closing of lakefront.

The lakefront area including, but not limited to, the marina and marina parking lot owned by or under jurisdiction of the city, being all that area between Lakeshore Boulevard to and including a reasonable distance into the waters of East Lake Tohopekaliga, shall be closed to the public each evening at sunset and shall be opened to the public each morning at sunrise. The boat ramp is open 24 hours a day, unless otherwise posted. It shall be prohibited for any person to be present in the lakefront area during the hours such area is closed to the public except if such person is doing any of the following:
(1) Fishing;
(2) Walking a domestic animal;
(3) Jogging, walking, bicycling, roller skating or roller blading when such activity is carried out in such a manner so that the person proceeds along the lakefront in a relatively straight line without stopping for periods of more than 15 minutes;
(4) Launching or bringing in a boat;
(5) Carrying on activities in accordance with a marina lease, a special event permit;
(6) Parking a vehicle in conjunction with any of the above-referenced activities.

Sec. 30-4. - Park hours.

(a) Established. The park hours for all city parks are established as sunrise to sunset each day, or as otherwise posted.
(b) Expansion or contraction of park hours. The city manager or his designee is authorized, upon application of any citizen, to permit a reasonable expansion or contraction of park hours for specific events or on good cause shown.

Sec. 30-5. - Glass beverage bottles prohibited on beach area of East Lake Tohopekaliga lakefront.

(a) Generally. It shall be unlawful for any person to be in possession of or to consume any beverage from glass beverage bottles upon the beach area of the East Lake Tohopekaliga lakefront.
(b) Definition of beach area. The beach area of the East Lake Tohopekaliga lakefront is defined as that area north of the north right-of-way line of Lakeshore Boulevard, east of the northerly extension of the Columbia Avenue centerline, west of the northerly extension of the Eastern Avenue centerline and south of the northerly city limits and the beach area of Chisholm Park is defined as that area, north of Rummell Road, west of Narcoosee Road a/k/a Highway 15, and south of Chisholm Park Trail.

Sec. 30-6. - Municipal swimming pool use fees.
The fees and charges for the use of the municipal swimming pool are as currently established or as hereafter adopted by resolution of the city council from time to time.

Sec. 30-7. - Fees, charges for use of parks, recreation facilities and equipment.

The fees and charges for the use of the city parks, recreation facilities and equipment are as currently established or as hereafter adopted by resolution of the city council from time to time.

Sec. 30-8. - Refund policy.

Requests for refunds will be considered on an individual basis and approved by the director of parks and recreation. An administrative charge will be assessed for each program refund requested by a participant. This charge will not apply to refunds requested by parks and recreation, i.e., key deposits, program failure, bad weather, etc.

Sec. 30-9. - Smoking prohibited.

(a) Definitions. The following words, terms and phrases, when used in this section, shall have the meanings ascribed to them in this subsection, except where the context clearly indicates a different meaning: Public property shall mean all parks, recreation areas and athletic facilities owned by the city or the county school district and located within the city, including but not limited to, land, bleachers, seating, recreational facilities, structures, and playing areas. However, public property shall not include the lake front area as defined in section 30-3.

(b) Prohibition. It shall be unlawful for any person to possess any ignited tobacco product or electronic tobacco product or to consume by smoking any tobacco product on any portion of the public property in the City of St. Cloud.

(c) Signage. The city manager, or his designee, shall display one or more signs prohibiting smoking at the areas as specified in this section.

Sec. 30-10. - Vending activities on the lakefront.

(a) Purpose. It is the purpose of this section to regulate specific commercial activities within public areas along the shores of East Lake Tohopekaliga, herein referred to as "lakefront"

(b) Defined. For the purposes of this section, the following definitions shall apply:

(1) The term "lakefront" shall be defined as the publicly owned lands north of Lakeshore Boulevard, between Columbia Avenue and Oregon Avenue, including all rights-of-way within 150 feet of such lands.

(2) The term "vendor" shall include, and be limited to, any person who sells by peddling or offering for sale by soliciting or displaying any food items, beverages, wares, or any other item of merchandise or service from a temporary or mobile structure.

(c) Vending prohibited. No vendor business or activity shall be permitted at the lakefront except as part of an approved special event or as provided for within this Code.

(d) Exceptions. Notwithstanding the provisions of this section, the city council may provide for specific vending activities at the lakefront. The city council may adopt by resolution, as may be amended from time to time, a program to permit vending activities consistent with the provisions of this section.

Sec. 30-11. - Idle speed zones on the lakefront.

(a) Established. Idle speed zones are hereby established within 200 feet of the Lakeshore Park which includes the public park, boat ramp, marina, breakwater, dock, swimming area, picnic area, seawall or any other public area which is located on water edge.

(b) Definition of idle speed. Idle speed shall mean the minimum speed that permits a boat operator to steer a vessel.

Sec. 30-12. - Penalty.

Any person committing an act which is prohibited or made unlawful by the provisions of this chapter shall, upon conviction, be punished as provided in section 2-287of the City Code, and in addition, violations of

this chapter shall be subject to enforcement by the city through code enforcement citation and/or the code enforcement board of the city.

Sec. 30-13 – 30-15 – Reserved.

Article II. Special Events

Sec. 30-16. Purpose and intent; City Exempt.

The purpose and intent of this article is to establish a permitting process for special events held on "regulated property" within the City limits that, among other things, because of their nature, create traffic control, crowd control, public safety, sanitation and/or other public health, safety and welfare issues of a nature sufficient to require review by the Police Department; the Fire Department; the Community Development Department; the Parks and Recreation Department; Public Services and other City staff as deemed necessary. The city, including any and all departments within, is exempt from the special event permitting process.

Sec. 30-17. Definitions.

The following words, terms, and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly requires otherwise:

(a) "*Advertise"* is the act of publicly announcing or calling public attention to a person, thing, place, or event and shall include, but not be limited to, the distribution of handbills or mass mailings, the use of outdoor advertising and announcements by radio, television, or newspaper. Distribution also includes the use of electronic media to include email, internet, social media sites, and other electronic means.

(b) *"Event Organizer"* means a business, corporation, Limited Liability Company, individual, or any other legal entity which organizes, sponsors, or operates a special event.

(c) *"Regulated Property"* means all real property located within the municipal boundaries of the City of St. Cloud, whose use may require action by City resources such as, but not limited to, the Police, Fire or Public Services Departments. Regulated property shall include the waterways, access points and lakes or other bodies of water under the control of the State of Florida, Osceola County Board of County Commissioners and/or the City of St. Cloud. Any property within the City of St. Cloud owned by the Osceola County School Board or any property being used subject to a motion photography permit or is exempt from this definition and the applicable requirements of this ordinance.

(d) *"Parade"* is any procession, march or assembly wherein the participants travel by foot, vehicle or otherwise in or upon any street, sidewalk, public right-of-way, bicycle path, public property, or public parking facility within the city; provided, however, that "parade" shall not include a peaceful procession or peaceful picketing that is conducted off the street or roadway in conformance with all traffic laws, city ordinances and state statutes and not in a manner as to obstruct vehicular or pedestrian traffic.

(e) *"Public Use"* is any lawful utilization of city owned parks, grounds, or other facilities which is not prohibited by any applicable regulation, ordinance, or law and which does not in fact interfere with, or tend to interfere with or obstruct the use of the park grounds or facilities by the general public or by any other person or person previously authorized to utilize the same.

(f) *"Special Event"* means a temporary assembly held on regulated property within the City of St. Cloud, not regularly used by the event organizer to conduct its business or affairs. Special events may be "for profit" or "not-for-profit". A special event shall include, but not be limited to, any ceremony, exhibition,

show, concert, pageant, rally, private entertainment events, professional performances, concerts, parades, street dances, sporting events, festivals, competitions, art shows, runs, races, walks or assembly which is intended and/or designed or advertised to encourage attendance or participation by the general public or expected to exceed the facility's established occupancy load and any event where fireworks shall be used, exploded or displayed.

g*) "Firework"* shall mean and include any combustible or explosive composition, or any substance or combination of substances, or, except as hereinafter provided, any article prepared for the purpose of producing a visible or an audible effect by combustion, explosion, deflagration or detonation, and shall include blank cartridges and toy cannons in which explosives are used, the type of balloons which require fire beneath to propel the same, firecrackers, torpedoes, skyrockets, Roman candles, dayglow bombs, and any fireworks containing any explosive or flammable compound or any tables or other device containing any explosive substance.

Sec. 30-18. Permit Required/ Exemptions.

(a) All special events held on regulated property within the City of St. Cloud require a special event permit in accordance with the provisions of this ordinance, unless expressly exempted. No event organizer required by this ordinance to obtain a special event permit shall advertise, engage in, participate in, aid, form, or start any special event prior to obtaining a special event permit from the City of St. Cloud.

(1) *Special Events requiring permit* shall be any event or activity, other than the normal day to day or seasonal operations of concerns licensed or established within the City of St. Cloud, Florida, which is designed, advertised or intended to attract the participation or attendance by the general public.

(b) Any event held on the water requires a special event permit.

(c) An existing business or establishment within the City of St. Cloud that holds, sponsors, supports, or otherwise provides for an event at that establishment which is outside of the normal scope of the intended business practices requires a special event permit if:

(1) Alcohol is served at the event, OR

(2) Because of the nature of the event creates traffic control, crowd control, public safety, sanitation, and other public health, safety or welfare issues, OR

(3) Exceeds the max capacity of the existing business or establishment.

(d) The issue of a special event permit by the City of St. Cloud shall not relieve any person from the duty to secure other permits or approvals as may be required by the city code to include, but not be limited to, a business tax receipt, street closure authorization, or other permits/authorizations.

Sec. 30-19. Application for Permits

Any person or entity seeking the issuance of a Special Event permit shall file an application with the Parks and Recreation Department as set forth herein.

(a) *Filing Period.* All special event applications shall be for a single event or may be submitted for a maximum of twelve (12) reoccurring special events held in the Entertainment District in a calendar year if the event utilizes the same event space, time, event footprint and public safety department approved downtown road closure plans and logistical details A complete application with all required documents for

a special event permit shall be filed with the Parks and Recreation Department not more than three hundred sixty-five (365) days before, and not less than sixty (60) calendar days before the date and time at which it is proposed to commence the event; provided, however, that the City Manager or their designee may waive the minimum sixty-day (60) day filing period and accept an application filed within a shorter period if after due consideration of the date, time, place, and nature of the event, the anticipated number of participants, and the necessity for an amount of city services which will be required in connection therewith, the City of St. Cloud or designee determines that such waiver will not present a hazard to the public safety because of the reduced amount of time available to fully process the application.

For special events requiring a facility reservation, event dates shall not be considered held until both the security deposit and fifty percent (50%) of the rental fees are paid.

(b) *Contents.* The application shall, at a minimum, state the following:

(1) The name of the event organizer, sponsor or responsible person or entity.

(2) The mailing address, email address, and telephone number of the event organizer, sponsor or responsible person or entity.

(3) If the event is to be conducted for, on behalf of, or by an organization, the name, address, and telephone number of the headquarters of the organization and of the authorized and responsible heads of such organization. While an organization may designate an authorized representative to act on its behalf for the event, all required documentation must be completed and submitted by the organization itself.

(4) The specific location of the proposed special event.

(5) The date of the special event and the hours of operation.

(6) The approximate number of spectators and/or participants present or participating in the event.

(7) A designation of any public facilities or equipment proposed to be utilized.

(8) State permit if state roadway is to be used.

(9) Overflow parking plan.

(10) If the event is a parade, the following additional information shall be required:

a. Registration deadline of special event permits is one hundred eighty (180) days prior to the event

b. The exact location or any marshalling or staging areas for the parade;

c. The time at which units of the parade will begin to arrive at the staging areas and the times at which all such units will be disbursed there from;

d. Must use approved designed parade route.

e. The approximate number of persons who, and animals and vehicles which, will constitute the parade, the types of animals and description of the vehicles;

f. A general description of the activities to be conducted at the special event together with attendance estimates.

(11) The use of fireworks at any special event within the City of St. Cloud requires prior approval from the City Council. The fireworks display must be conducted by a licensed and insured professional pyrotechnician, and all necessary permits and safety measures must be in place. The event organizer is responsible for ensuring compliance with all local, state, and federal regulations regarding the use of fireworks. Approval from the City Council is required before any fireworks display may take place at the event.

(12) Proof of general liability insurance, with the City of St. Cloud named as an additional insured if the event is held on public or City owned property.

(13) City representatives from the Police and Fire Departments will provide a security plan for the event applicant. A predetermined manpower allocation table shall be used as a guideline in order to determine how many officers with arrest powers will be assigned to the special event (if any). The Chief of Police or designee may adjust the requirement of officers with arrest powers as he/she determines necessary. The applicant is responsible for securing the necessary police and fire services, and all associated fees for these services are the applicant's sole responsibility. Only City of St. Cloud personnel can be used to provide the required security. Private security may only be allowed to supplement the security requirements and must be approved by the Chief of Police or their designee.

(14) A site plan, which shall show at a minimum the following:

a. The dimensions and locations of all permanent and proposed temporary structures to be located on the property. Should any temporary structures be required for the event, the applicants will be responsible for obtaining all necessary building permits and meeting all requirements of applicable building and fire codes;

b. Ingress and egress locations; access to the site must not impede normal traffic flow on adjacent roadways;

c. Events requiring road closures within the City of St. Cloud must utilize the provided and approved road closure plans. The city will provide the necessary closure Traffic Management Plan (MOT), with the event organizer responsible for covering all associated costs. Requests for road closures on Lakeshore Blvd. will be reviewed and considered if the anticipated event participation is equal to or greater than five percent of the city's population. Events requiring the closure of Lakeshore Blvd. will be limited to one closure per month, for a total of 12 closures per year. Any requests for additional road closures beyond this limit will require approval from the City Council and/or designee.

d. The capacity and location of restroom facilities (either permanent or temporary) sufficient to meet the anticipated demand at the event in accordance with FL State Administrative Code: 62-6.0101. Portable Restrooms and Portable or Stationary Holding Tanks.

e. Adequate provision for solid waste collection and disposal; as determined by City.

f. A parking plan with all on-site and overflow parking (if necessary) and proposed traffic flow, in addition to any necessary traffic control devices at the special event location. Road closures in the Entertainment District for non-City events will be limited to two to three per month on a first come, first served basis.

g. Location of all activities including but not limited to tents, vendors and stages.

(15) A certificate of good standing certifying that the event organizer is authorized to do business in Florida if the event organizer is a corporation or Limited Liability Company or some other business entity required to be registered with the Department of State.

(16) Copies of all fliers, handbills, newspaper advertisements and other advertising that the event organizer anticipates using to promote or advertise the special event.

(17) Written proof of permission from the owner of the regulated property for the use of said property by the event organizer for the special event. The owner shall be required to sign the application and agree to any conditions placed on the special event by the City. If the owner of the property is the City or the property is public property, this term shall not be required.

(18) Copies of all required federal, state and local business or regulatory licenses required to be held by the event organizer.

(19) Any other documentation or information that city staff or the City Council, upon appeal, determines to be reasonably necessary to properly evaluate the application.

(c) *Fees*. A non-refundable permit application fee as approved by resolution of the City Council, shall be paid to the City of St. Cloud at the time the application is filed or within three (3) business days. For special events requiring a facility reservation, a security deposit and fifty percent (50%) of the rental fee shall be due at the time of booking to secure the reservation date. All facility fees must be paid in full no later than thirty (30) days prior to the scheduled event. Event operation fees shall be paid in full no later than thirty (30) days prior to the scheduled event date, with the exception of Public Safety fees, which shall be billed following the event.

(d) *Cancellation*. The City of St. Cloud reserves the right to cancel any special event at its discretion for reasons including, but not limited to, public safety concerns, severe weather conditions, failure to comply with applicable laws and regulations, or other circumstances that may pose a risk to the health, safety, or well-being of participants or the general public. The decision to cancel an event will be made by the city manager or its designated representatives, and the event organizer will be notified promptly. In the event of a cancellation, the city will evaluate the situation and, at its discretion, may provide a partial or full refund of fees paid in connection with the event. Refund eligibility will be determined based on the specific circumstances of the cancellation. The city's authority to cancel an event is final.

(e) *Decision and appeal.* The city manager or designee shall review the completed application. If the application for a permit is denied, the applicant may appeal the denial to the City Council by submitting a written request for appeal to the city manager within 30 days of the date of denial. The City Council shall review the matter at its next available regular meeting and shall review the application together with all supporting documentation and city departmental comments considered by the city manager or designee in making a decision. The City Council may uphold, overturn or revise the decision of the city manager or designee and the City Council's decision shall be final.

Sec. 30-20. Police Protection.

After obtaining as much information as the Chief of Police or his/her designee reasonably deems necessary regarding a permit application, it shall be determined whether and to what extent additional police protection reasonably will be required for the event for purposes of traffic, crowd control, and security. If additional police protection for the event is deemed necessary by the Chief of Police or his/her designee, he/she shall so inform the applicant for the permit. The applicant then shall have the duty to secure police protection acceptable to the Chief of Police or his/her designee at the sole expense of the applicant and shall prepay the expenses of such protection as required. The Chief of Police or his/her designee shall consider what additional manpower, equipment and supplies are needed, as well as any other items or expenses which will be necessary.

Sec. 30-21. Fire Protection and Emergency Medical Services.

After obtaining as much information as the Fire Chief and Fire Marshal or their designee reasonably deems necessary regarding a permit application, it shall be determined as to the need for on-site fire watch, crowd managers or emergency medical personnel. The Fire Marshal or his/her designee shall consider such factors as the location, number of anticipated participants and spectators, and type of event, including the application of appropriate codes and ordinances. If fire watch, crowd managers and/or emergency medical personnel for the event are deemed necessary by the Fire Chief or Fire Marshal, he/she shall so inform the applicant who shall have the responsibility to secure fire watch/emergency medical personnel/crowd managers reasonably acceptable to the Fire Chief and/or Fire Marshal or their designee at the sole expense of the applicant and shall pay the expenses of such protection. Only state certified licensed professional fire/emergency medical personnel shall be used for this purpose, preferably City of St. Cloud Fire Department employees and equipment. The conduct of the event shall not introduce extraordinary hazards to fire protection and/or life safety in the immediate or adjacent areas.

Section 3. Conflict. All ordinances or parts of ordinances, all City Code sections or parts of City Code sections, and all resolutions or parts of resolutions in conflict with this Ordinance are hereby repealed to the extent of such conflict.

Section 4. Severability. Should any provision of this Ordinance be declared by a court of competent jurisdiction to be invalid, the same shall not affect the validity of the ordinance as a whole, or any part thereof, other than the part declared to be invalid.

Section 5. Administrative Correction. Regardless of whether such inclusion in the Code as described in Section 6 is accomplished, this Ordinance may be re-numbered or re-lettered and the correction of typographical and or/scrivener's errors which do not affect the intent may be authorized by the City manager or designee, without need of public hearing, by filing a corrected or re-codified copy of same with the City Clerk.

Section 6. Codification. The text of Section 1 and Section 2 of this ordinance shall be codified as a part of the St. Cloud City Code The codifier is authorized to make editorial changes not effecting the substance of this ordinance by the substitution of "article" for "ordinance", "section" for "paragraph", or otherwise to take such editorial license.

Section 7. Effective Date. This Ordinance shall be effective immediately upon its adoption as provided by law.

FIRST READING ON THE 9th day of October 2025.
SECOND READING ON THE 13th day of November 2025.

PASSED AND ADOPTED by the City Council of the City of St. Cloud, this 13th day of November 2025.

CITY OF ST. CLOUD

_____
Christian B. Robertson, Mayor

ATTEST:

_____
Ivy Llauro, City Clerk

LEGAL IN FORM AND VALID IF ADOPTED:
deBeaubien, Simmons, Knight, Mantzaris & Neal

_____
Daniel F. Mantzaris, City Attorney

ORDINANCE NO. ~~2025-17~~ 2025-58

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, AMENDING ~~CHAPTER 30 "PARKS AND RECREATION"; ARTICLE II, "SPECIAL EVENTS" OF THE CITY CODE OF ORDINANCES; SECTION 30-16 "PURPOSE AND INTENT" EXEMPTING CITY EVENTS FROM THE PERMITTING PROCESS; AND SECTION 30-19 "APPLICATION FOR PERMIT" BY REQUIRING COUNCIL APPROVAL FOR THE USE OF FIREWORKS, REDEFINING SAFETY AND SECURITY PLAN, TO INCLUDE ROAD AND PARKING CLOSURE PLANS AND REQUIREMENTS, IF APPLICABLE, ADDING SOLID WASTE PROVISIONS, REQUIRING AN EVENT LAYOUT PLAN, ESTABLISHING A CANCELLATION AUTHORITY AND ESTABLISHING AN EVENT DECISION AND APPEAL PROCESS; PROVIDING FOR CONFLICT, SEVERABILITY, ADMINISTRATIVE CORRECTION CODIFICATION AND AN EFFECTIVE DATE.~~ AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, AMENDING THE LAND DEVELOPMENT CODE AS FOLLOWS: AMENDING GROWTH MANAGEMENT SERVICES TO READ COMMUNITY DEVELOPMENT DEPARTMENT, ARTICLE I - SEC. 30-2(A) REMOVE REFUNDABLE PERFORMANCE BOND, SEC. 30-3 ADD BOAT RAMP HOURS, 30.4(A) AMEND DAWN TO DUSK TO READ SUNRISE TO SUNSET, ARTICLE II - SEC. 30-16 AMENDING MAJOR SPECIAL EVENT DEFINITION TO SPECIAL EVENT, REMOVING THE EVENT CAP OF 250 PEOPLE AND REMOVING MINOR SPECIAL EVENT DEFINITION, AMENDING SEC. 30-18(A)(1) TO SPECIAL EVENTS AND REMOVING THE CAP OF 250 PEOPLE, SEC. 30-18(A)(2) REMOVING MINOR SPECIAL EVENTS, AMENDING SECTION SEC, 30-18(B) TO REMOVE A DAILY ATTENDANCE OF 250 PERSON OR GREATER, AMENDING SEC. 30—18(C) (1) REMOVING THE DAILY ATTENDANCE OF THE EVENT IS GREATER THAN 250 PERSONS OR, AMENDING SEC. 30-19 TO REMOVE MINOR SPECIAL EVENT, SEC 30-19(A) LIMITING THE NUMBER OF SPECIAL EVENTS WITHIN A CALENDAR YEAR AND SETTING RESERVATION REQUIREMENTS, SEC. 30-19(B)(3) SETTING REQUIREMENTS FOR WHO MAY ACT ON AN ORGANIZATION'S BEHALF, 30-19(C) SETTING PAYMENT TERMS AND PROVIDING CONFLICT, SEVERABILITY, CODIFICATION AND AN EFFECTIVE DATE.

WHEREAS, The City Council recognizes the impact that special events have on the availability of city services and also on the health, safety and welfare of the citizens of the City of St. Cloud, Florida, and

WHEREAS, the permitting, planning and implementation of events on public streets, sidewalks, property and places and certain non-public real property within the City, requires various City staff departments, including the Police, Fire, Public Services, ~~Growth Management Services~~Community Development Department, and Parks and Recreation Departments to collaborate in an effective process to review and approve special events in the best interests of the citizens of St. Cloud.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA:

Section 1. Chapter 30, "Parks and Recreation", Article II "Special Events", Sections 30-19 "Application for Permits" of the Code of the City of St. Cloud, Florida is amended as follows (underline depicts added language; strikethrough depicts deleted):

Article I. In General

Sec. 30-1. - Operation of vehicles in parks, recreational areas, lakefronts and cemeteries. It shall be unlawful for any person to drive or propel any vehicle, or drive any horse or other animal in, over or through any park, recreational area or lakefront area in the city except along and upon park drives, parkways and park boulevards, or for any person to ride any bicycle, tricycle or toy vehicles through any park except along and upon the park drives, parkways, park boulevards and upon paths set apart and designated as bicycle paths, except when, with the approval of the city manager and after a special event permit as required in section 30-2 is obtained, a special event is to take place. The city manager may approve the use of recreational vehicles along and upon recreational areas or lakefront areas.

Sec. 30-2. - Special event permit.

(a) Required. A Special Event permit will be required to be issued to the organization or individual sponsoring any special events. The permit fee ~~and a refundable performance bond as~~ currently established or as hereafter adopted by resolution of the city council from time to time will be required. ~~After inspection by the city manager or his designee, showing the area has been returned to its original condition as practically as possible, the city will issue a refund check of the bond.~~

(b) Electrical, sanitation and health requirements. Whenever a permitted special event is held, all electrical, sanitation and health requirements must be met. All recreational vehicles shall be completely self-contained. Failure to meet the specified electrical and health standards will result in the revocation of the permit.

Sec. 30-3. - Closing of lakefront.

The lakefront area including, but not limited to, the marina and marina parking lot owned by or under ~~the~~ jurisdiction of the city, being all that area between Lakeshore Boulevard to and including a reasonable distance into the waters of East Lake Tohopekaliga, shall be closed to the public each evening at sunset and shall be opened to the public each morning at sunrise. The boat ramp is open 24 hours a day, unless otherwise posted. It shall be prohibited for any person to be present in the lakefront area during the hours such area is closed to the public except if such person is doing any of the following:

(1) Fishing;
(2) Walking a domestic animal;
(3) Jogging, walking, bicycling, roller skating or roller blading when such activity is carried out in such a manner so that the person proceeds along the lakefront in a relatively straight line without stopping for periods of more than 15 minutes;
(4) Launching or bringing in a boat;
(5) Carrying on activities in accordance with a marina lease, a special event permit;
(6) Parking a vehicle in conjunction with any of the above-referenced activities.

Sec. 30-4. - Park hours.

(a) Established. The park hours for all city parks are established as ~~dawn~~ sunrise to ~~dusk~~ sunset each day, or as otherwise posted.

(b) Expansion or contraction of park hours. The city manager or his designee is authorized, upon application of any citizen, to permit a reasonable expansion or contraction of park hours for specific events or on good cause shown.

Sec. 30-5. - Glass beverage bottles prohibited on beach area of East Lake Tohopekaliga lakefront.

(a) Generally. It shall be unlawful for any person to be in possession of or to consume any beverage from glass beverage bottles upon the beach area of the East Lake Tohopekaliga lakefront.
(b) Definition of beach area. The beach area of the East Lake Tohopekaliga lakefront is defined as that area north of the north right-of-way line of Lakeshore Boulevard, east of the northerly extension of the Columbia Avenue centerline, west of the northerly extension of the Eastern Avenue centerline and south of the northerly city limits and the beach area of Chisholm Park is defined as that area, north of Rummell Road, west of Narcoosee Road a/k/a Highway 15, and south of Chisholm Park Trail.

Sec. 30-6. - Municipal swimming pool use fees.

The fees and charges for the use of the municipal swimming pool are as currently established or as hereafter adopted by resolution of the city council from time to time.

Sec. 30-7. - Fees, charges for use of parks, recreation facilities and equipment.

The fees and charges for the use of the city parks, recreation facilities and equipment are as currently established or as hereafter adopted by resolution of the city council from time to time.

Sec. 30-8. - Refund policy.

Requests for refunds will be considered on an individual basis and approved by the director of parks and recreation. An administrative charge will be assessed for each program refund requested by a participant. This charge will not apply to refunds requested by parks and recreation, i.e., key deposits, program failure, bad weather, etc.

Sec. 30-9. - Smoking prohibited.

(a) Definitions. The following words, terms and phrases, when used in this section, shall have the meanings ascribed to them in this subsection, except where the context clearly indicates a different meaning:
Public property shall mean all parks, recreation areas and athletic facilities owned by the city or the county school district and located within the city, including but not limited to, land, bleachers, seating, recreational facilities, structures, and playing areas. However, public property shall not include the lake front area as defined in section 30-3.
(b) Prohibition. It shall be unlawful for any person to possess any ignited tobacco product or electronic tobacco product or to consume by smoking any tobacco product on any portion of the public property in the City of St. Cloud.
(c) Signage. The city manager, or his designee, shall display one or more signs prohibiting smoking at the areas as specified in this section.

Sec. 30-10. - Vending activities on the lakefront.

(a) Purpose. It is the purpose of this section to regulate specific commercial activities within public areas along the shores of East Lake Tohopekaliga, herein referred to as "lakefront"
(b) Defined. For the purposes of this section, the following definitions shall apply:
(1) The term "lakefront" shall be defined as the publicly owned lands north of Lakeshore Boulevard, between Columbia Avenue and Oregon Avenue, including all rights-of-way within 150 feet of such lands.
(2) The term "vendor" shall include, and be limited to, any person who sells by peddling or offering for sale by soliciting or displaying any food items, beverages, wares, or any other item of merchandise or service from a temporary or mobile structure.

(c) Vending prohibited. No vendor business or activity shall be permitted at the lakefront except as part of an approved special event or as provided for within this Code.
(d) Exceptions. Notwithstanding the provisions of this section, the city council may provide for specific vending activities at the lakefront. The city council may adopt by resolution, as may be amended from time to time, a program to permit vending activities consistent with the provisions of this section.

Sec. 30-11. - Idle speed zones on the lakefront.

(a) Established. Idle speed zones are hereby established within 200 feet of the Lakeshore Park which includes the public park, boat ramp, marina, breakwater, dock, swimming area, picnic area, seawall or any other public area which is located on water edge.
(b) Definition of idle speed. Idle speed shall mean the minimum speed that permits a boat operator to steer a vessel.

Sec. 30-12. - Penalty.

Any person committing an act which is prohibited or made unlawful by the provisions of this chapter shall, upon conviction, be punished as provided in section 2-287of the City Code, and in addition, violations of this chapter shall be subject to enforcement by the city through code enforcement citation and/or the code enforcement board of the city.

Sec. 30-13 – 30-15 – Reserved.

Article II. Special Events

Sec. 30-16. Purpose and intent; City Exempt.

The purpose and intent of this article is to establish a permitting process for special events held on "regulated property" within the City limits that, among other things, because of their nature, create traffic control, crowd control, public safety, sanitation and/or other public health, safety and welfare issues of a nature sufficient to require review by the Police Department; the Fire Department; ~~the Growth Management Services Department~~the Community Development Department; the Parks and Recreation Department; Public Services and other City staff as deemed necessary. The city, including any and all departments within, is exempt from the special event permitting process.

Sec. 30-17. Definitions.

The following words, terms, and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly requires otherwise:

(a) "*Advertise"* is the act of publicly announcing or calling public attention to a person, thing, place, or event and shall include, but not be limited to, the distribution of handbills or mass mailings, the use of outdoor advertising and announcements by radio, television, or newspaper. Distribution also includes the use of electronic media to include email, internet, social media sites, and other electronic means.

(b) *"Event Organizer"* means a business, corporation, Limited Liability Company, individual, or any other legal entity which organizes, sponsors, or operates a special event.

(c) *"Regulated Property"* means all real property located within the municipal boundaries of the City of St. Cloud, whose use may require action by City resources such as, but not limited to, the Police, Fire or Public Services Departments. Regulated property shall include the waterways, access points and lakes or other bodies of water under the control of the State of Florida, Osceola County Board of County

Commissioners and/or the City of St. Cloud. Any property within the City of St. Cloud owned by the Osceola County School Board or any property being used subject to a motion photography permit or is exempt from this definition and the applicable requirements of this ordinance.

(d) *"Parade"* is any procession, march or assembly wherein the participants travel by foot, vehicle or otherwise in or upon any street, sidewalk, public right-of-way, bicycle path, public property, or public parking facility within the city; provided, however, that "parade" shall not include a peaceful procession or peaceful picketing that is conducted off the street or roadway in conformance with all traffic laws, city ordinances and state statutes and not in a manner as to obstruct vehicular or pedestrian traffic.

(e) *"Public Use"* is any lawful utilization of city owned parks, grounds, or other facilities which is not prohibited by any applicable regulation, ordinance, or law and which does not in fact interfere with, or tend to interfere with or obstruct the use of the park grounds or facilities by the general public or by any other person or person previously authorized to utilize the same.

(f) *"~~Major~~ Special Event"* means a temporary assembly held on regulated property within the City of St. Cloud, not regularly used by the event organizer to conduct its business or affairs. Special events may be "for profit" or "not-for-profit". A special event shall include, but not be limited to, any ceremony, exhibition, show, concert, pageant, rally, private entertainment events, professional performances, concerts, parades, street dances, sporting events, festivals, competitions, art shows, runs, races, walks or assembly which is intended and/or designed or advertised to encourage attendance or participation by the general public ~~and~~ or expected to exceed the facility's established occupancy load ~~with the goal of attracting participation of more than two hundred fifty (250) people~~ and any event where fireworks shall be used, exploded or displayed.

~~(g) "Minor Special Events" means by the event organizer to conduct its business or affairs. Special events may be "for profit" or "not-for-profit". A special event shall include, but not be limited to, any ceremony, exhibition, show, concert, pageant, rally, private entertainment events, professional performances, concerts, street dances, sporting events, festivals, competitions, art shows, runs/ races/ walks or assembly which is intended and/or designed or advertised with the goal of attracting participation of more than seventy-five (75) people and up to two forty-nine (249) people.~~

~~(h~~g*) "Firework"* shall mean and include any combustible or explosive composition, or any substance or combination of substances, or, except as hereinafter provided, any article prepared for the purpose of producing a visible or an audible effect by combustion, explosion, deflagration or detonation, and shall include blank cartridges and toy cannons in which explosives are used, the type of balloons which require fire beneath to propel the same, firecrackers, torpedoes, skyrockets, Roman candles, dayglow bombs, and any fireworks containing any explosive or flammable compound or any tables or other device containing any explosive substance.

Sec. 30-18. Permit Required/ Exemptions.

(a) All special events held on regulated property within the City of St. Cloud require a special event permit in accordance with the provisions of this ordinance, unless expressly exempted. No event organizer required by this ordinance to obtain a special event permit shall advertise, engage in, participate in, aid, form, or start any special event prior to obtaining a special event permit from the City of St. Cloud.

(1) ~~*Major*~~ *Special Events requiring permit* shall be any event or activity, other than the normal day to day or seasonal operations of concerns licensed or established within the City of St. Cloud, Florida, which is designed, advertised or intended to attract the participation or attendance by the general public. ~~of more than two hundred fifty (250) people.~~

(2) ~~*Minor Special events requiring* permit shall be any events or activities, other than the normal day-to-day or seasonal operations of concerns licensed or established within the City of St. Cloud, Florida, which is designed or intended to attract the participation of more than seventy-five people and less than two hundred forty-nine people.~~

(b) Any event held on the water ~~which expects a daily attendance of 250 persons or greater, OR serves alcohol, OR by nature of the event creates traffic control, crowd control, public safety, sanitation and other public health, safety and welfare issues~~ requires a special event permit.

(c) An existing business or establishment within the City of St. Cloud that holds, sponsors, supports, or otherwise provides for an event at that establishment which is outside of the normal scope of the intended business practices requires a special event permit if:

~~(1) The daily attendance of the event is greater than 250 persons OR~~

(~~2~~1) Alcohol is served at the event, OR

(~~3~~2) Because of the nature of the event creates traffic control, crowd control, public safety, ~~OR~~ sanitation, and other public health, safety ~~and~~ or welfare issues, OR

(~~4~~3) Exceeds the max capacity of the existing business or establishment.

(d) The issue of a ~~S~~special ~~E~~event permit by the City of St. Cloud shall not relieve any person from the duty to secure other permits or approvals as may be required by the city code to include, but not be limited to, a business tax receipt, street closure authorization, or other permits/authorizations.

Sec. 30-19. Application for Permits

Any person or entity seeking the issuance of a ~~Major Special Event or Minor~~ Special Event permit shall file an application with the Parks and Recreation Department as set forth herein.

(a) *Filing Period.* All special event applications shall be for a single event or may be submitted for a maximum of twelve (12) reoccurring special events held in the Entertainment District in a calendar year if the event utilizes the same event space, time, event footprint and public safety department approved downtown road closure plans and logistical details ~~and shall not be valid for reoccurring future events.~~ A complete application with all required documents for a special event permit shall be filed with the Parks and Recreation Department not more than three hundred sixty-five (365) days before, and not less than sixty ~~days~~ (60) calendar days before the date and time at which it is proposed to commence the event; provided, however, that the City Manager or their designee may waive the minimum sixty-day (60) day filing period and accept an application filed within a shorter period if after due consideration of the date, time, place, and nature of the event, the anticipated number of participants, and the necessity for an amount of city services which will be required in connection therewith, the City of St. Cloud or designee determines that such waiver will not present a hazard to the public safety because of the reduced amount of time available to fully process the application.

For special events requiring a facility reservation, event dates shall not be considered held until both the security deposit and fifty percent (50%) of the rental fees are paid.

(b) *Contents.* The application shall, at a minimum, state the following:

(1) The name of the event organizer, sponsor or responsible person or entity.

(2) The mailing address, email address, and telephone number of the event organizer, sponsor or responsible person or entity.

(3) If the event is to be conducted for, on behalf of, or by an organization, the name, address, and telephone number of the headquarters of the organization and of the authorized and responsible heads of such organization. While an organization may designate an authorized representative to act on its behalf for the event, all required documentation must be completed and submitted by the organization itself.

(4) The specific location of the proposed special event.

(5) The date of the special event and the hours of operation.

(6) The approximate number of spectators and/or participants present or participating in the event.

(7) A designation of any public facilities or equipment proposed to be utilized.

(8) State permit if state roadway is to be used.

(9) Overflow parking plan.

(10) If the event is a parade, the following additional information shall be required:

a. Registration deadline of special event permits is one hundred eighty (180) days prior to the event

b. The exact location or any marshalling or staging areas for the parade;

c. The time at which units of the parade will begin to arrive at the staging areas and the times at which all such units will be disbursed there from;

d. Must use approved designed parade route.

e. The approximate number of persons who, and animals and vehicles which, will constitute the parade, the types of animals and description of the vehicles;

f. A general description of the activities to be conducted at the special event together with attendance estimates.

(11) The use of fireworks at any special event within the City of St. Cloud requires prior approval from the City Council. The fireworks display must be conducted by a licensed and insured professional pyrotechnician, and all necessary permits and safety measures must be in place. The event organizer is responsible for ensuring compliance with all local, state, and federal regulations regarding the use of fireworks. Approval from the City Council is required before any fireworks display may take place at the event.

(12) Proof of general liability insurance, with the City of St. Cloud named as an additional insured if the event is held on public or City owned property.

(13) City representatives from the Police and Fire Departments will provide a security plan for the event applicant. A predetermined manpower allocation table shall be used as a guideline in order to determine how many officers with arrest powers will be assigned to the special event (if any). The Chief of Police or designee may adjust the requirement of officers with arrest powers as he/she determines necessary. The applicant is responsible for securing the necessary police and fire services, and all associated fees for these services are the applicant's sole responsibility. Only City of St. Cloud personnel can be used to provide the required security. Private security may only be allowed to supplement the security requirements and must be approved by the Chief of Police or their designee.

(14) A site plan, which shall show at a minimum the following:

a. The dimensions and locations of all permanent and proposed temporary structures to be located on the property. Should any temporary structures be required for the event, the applicants will be responsible for obtaining all necessary building permits and meeting all requirements of applicable building and fire codes;

b. Ingress and egress locations; access to the site must not impede normal traffic flow on adjacent roadways;

c. Events requiring road closures within the City of St. Cloud must utilize the provided and approved road closure plans. The city will provide the necessary closure Traffic Management Plan (MOT), with the event organizer responsible for covering all associated costs. Requests for road closures on Lakeshore Blvd. will be reviewed and considered if the anticipated event participation is equal to or greater than five percent of the city's population. Events requiring the closure of Lakeshore Blvd. will be limited to one closure per month, for a total of 12 closures per year. Any requests for additional road closures beyond this limit will require approval from the City Council and/or designee.

d. The capacity and location of restroom facilities (either permanent or temporary) sufficient to meet the anticipated demand at the event in accordance with FL State Administrative Code: ~~64E-6.0101~~ 62-6.0101. Portable Restrooms and Portable or Stationary Holding Tanks.

e. Adequate provision for solid waste collection and disposal; as determined by City.

~~f~~. A parking plan with all on-site and overflow parking (if necessary) and proposed traffic flow, in addition to any necessary traffic control devices at the special event location. Road closures in the ~~e~~Entertainment ~~d~~District for non-City events will be limited to two to three per month on a first come, first served basis.

g. Location of all activities including but not limited to tents, vendors and stages.

(15) A certificate of good standing certifying that the event organizer is authorized to do business in Florida if the event organizer is a corporation or Limited Liability Company or some other business entity required to be registered with the Department of State.

(16) Copies of all fliers, handbills, newspaper advertisements and other advertising that the event organizer anticipates using to promote or advertise the special event.

(17) Written proof of permission from the owner of the regulated property for the use of said property by the event organizer for the special event. The owner shall be required to sign the application and agree to any conditions placed on the special event by the City. If the owner of the property is the City or the property is public property, this term shall not be required.

(18) Copies of all required federal, state and local business or regulatory licenses required to be held by the event organizer.

(19) Any other documentation or information that city staff or the City Council, upon appeal, determines to be reasonably necessary to properly evaluate the application.

(c) *Fees*. A non-refundable permit application fee as approved by resolution of the City Council, shall be paid to the City of St. Cloud at the time the application is filed or within three (3) business days. For special events requiring a facility reservation, a security deposit and fifty percent (50%) of the rental fee shall be due at the time of booking to secure the reservation date. All facility fees must be paid in full no later than thirty (30) days prior to the scheduled event. Event operation fees shall be paid in full no later than thirty (30) days prior to the scheduled event date, with the exception of Public Safety fees, which shall be billed following the event.

(d) *Cancellation*. The City of St. Cloud reserves the right to cancel any special event at its discretion for reasons including, but not limited to, public safety concerns, severe weather conditions, failure to comply with applicable laws and regulations, or other circumstances that may pose a risk to the health, safety, or well-being of participants or the general public. The decision to cancel an event will be made by the city manager or its designated representatives, and the event organizer will be notified promptly. In the event of a cancellation, the city will evaluate the situation and, at its discretion, may provide a partial or full refund of fees paid in connection with the event. Refund eligibility will be determined based on the specific circumstances of the cancellation. The city's authority to cancel an event is final.

(e) *Decision and appeal.* The city manager or designee shall review the completed application. If the application for a permit is denied, the applicant may appeal the denial to the City Council by submitting a written request for appeal to the city manager within 30 days of the date of denial. The City Council shall review the matter at its next available regular meeting and shall review the application together with all supporting documentation and city departmental comments considered by the city manager or designee in making a decision. The City Council may uphold, overturn or revise the decision of the city manager or designee and the City Council's decision shall be final.

Sec. 30-20. Police Protection.

After obtaining as much information as the Chief of Police or his/her designee reasonably deems necessary regarding a permit application, it shall be determined whether and to what extent additional police protection reasonably will be required for the event for purposes of traffic, crowd control, and security. If additional police protection for the event is deemed necessary by the Chief of Police or his/her designee, he/she shall so inform the applicant for the permit. The applicant then shall have the duty to secure police protection acceptable to the Chief of Police or his/her designee at the sole expense of the applicant and shall prepay the expenses of such protection as required. The Chief of Police or his/her designee shall consider what additional manpower, equipment and supplies are needed, as well as any other items or expenses which will be necessary.

Sec. 30-21. Fire Protection and Emergency Medical Services.

After obtaining as much information as the Fire Chief and Fire Marshal or their designee reasonably deems necessary regarding a permit application, it shall be determined as to the need for on-site fire watch, crowd managers or emergency medical personnel. The Fire Marshal or his/her designee shall consider such factors as the location, number of anticipated participants and spectators, and type of event, including the application of appropriate codes and ordinances. If fire watch, crowd managers and/or emergency medical personnel for the event are deemed necessary by the Fire Chief or Fire Marshal, he/she shall so inform the applicant who shall have the responsibility to secure fire watch/emergency medical personnel/crowd managers reasonably acceptable to the Fire Chief and/or Fire Marshal or their designee at the sole expense of the applicant and shall ~~pre~~pay the expenses of such protection. Only state certified licensed professional fire/emergency medical personnel shall be used for this purpose, preferably City of St. Cloud Fire Department employees and equipment. The conduct of the event shall not introduce extraordinary hazards to fire protection and/or life safety in the immediate or adjacent areas.

Section 3. Conflict. All ordinances or parts of ordinances, all City Code sections or parts of City Code sections, and all resolutions or parts of resolutions in conflict with this Ordinance are hereby repealed to the extent of such conflict.

Section 4. Severability. Should any provision of this Ordinance be declared by a court of competent jurisdiction to be invalid, the same shall not affect the validity of the ordinance as a whole, or any part thereof, other than the part declared to be invalid.

Section 5. Administrative Correction. Regardless of whether such inclusion in the Code as described in Section 6 is accomplished, this Ordinance may be re-numbered or re-lettered and the correction of typographical and or/scrivener's errors which do not affect the intent may be authorized by the City manager or designee, without need of public hearing, by filing a corrected or re-codified copy of same with the City Clerk.

Section 6. Codification. The text of Section 1 and Section 2 of this ordinance shall be codified as a part of the St. Cloud City Code The codifier is authorized to make editorial changes not effecting the substance of this ordinance by the substitution of "article" for "ordinance", "section" for "paragraph", or otherwise to take such editorial license.

Section ~~6~~7. Effective Date. This Ordinance shall be effective immediately upon its adoption as provided by law.

FIRST READING ON THE ~~10th~~ 9th day of ~~April~~ October 2025.
SECOND READING ON THE ~~8th~~13th day of ~~May~~ November 2025.

PASSED AND ADOPTED by the City Council of the City of St. Cloud, this ~~8th~~ 13th day of ~~May~~ November 2025.

CITY OF ST. CLOUD

_____
Christian B. Robertson, Mayor

ATTEST:

_____
Ivy Llauro, City Clerk

LEGAL IN FORM AND VALID IF ADOPTED:
deBeaubien, Simmons, Knight, Mantzaris & Neal

_____
Daniel F. Mantzaris, City Attorney

Meeting: November 13, 2025

Agenda Item Type: Public Hearings
Ordinance No. 2025-67 Harvest Grove (FKA Nona Townhomes) PUD PMP/FMP

Community Development Agenda Item:
FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-67, an ordinance of the City Council of the City of St. Cloud, Florida, providing for the Zoning Amendment of the Zoning Map of the Land Development Code of the City of St. Cloud, Florida, specifically changing the zoning designation of approximately +/-17.35 acres identified as Harvest Grove PUD, Project #PUD24-00005, from "R-1B" Single-Family Dwelling to "PUD" Planned Unit Development, Preliminary Master Plan/Final Master Plan (PUD,PMP/FMP), generally located north of East Irlo Bronson Memorial Highway, east of South Narcoossee Road, south of Lillian Lee Road, and west of Puffin Road; providing for entering the designation on the official Zoning Map, filing of the Planning Commission recommendation and proof of publication, severability, and effective date. (Above is full title) **ACTION ON ORDINANCE NO. 2025-67** (This is a Quasi-Judicial proceeding)

Strategic Key Focus Areas:
High-Performing Government

Background Information:
The subject property is generally located north of East Irlo Bronson Memorial Highway, east of South Narcoossee Road, south of Lillian Lee Road, and west of Puffin Road. As proposed, the development will support residential infill in an appropriate area with existing infrastructure, compatible residential uses, and access to arterial roadways. The proposed development program will provide for infill residential development at a density of 7.97 dwelling units per acre (DU/Ac.) compatible with the underlying Future Land Use of Medium Density Residential that allows for a maximum of 10 DU/Ac.

The property was annexed into the City of St. Cloud by Ordinance No. 2025-12 and received a Future Land Use designation of Medium Density Residential by Ordinance 2025-13 to allow to facilitate the development of a 136 Single-Family Townhome units community. Concurrently, the applicant is requesting consideration of a Preliminary Subdivision Plan / Final Master Plan (PSP25-00002) for the creation of a 136-unit subdivision with 60 front-loaded units and 76 rear-loaded units with 0.28 acres of right-of-way dedication along Puffin Road.

Legal Authority:
Per section 1.3.7 of the Land Development Code, The City Council shall review the recommendation from the Planning Commission and render a decision based on the recommendation and information presented. The Planning Commission recommendation is based on the 16 required findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant responses to the 16 required findings have been provided as an attachment for the City Council's review.

Budget and Recommendation:
There is no cost associated with this item.

On October 21, 2025, the Planning Commission -Motion to recommend approval by Grigsby. Seconded by Douglas. Passed 3-2. Lantry and Alexander voted nay.

Staff reviewed this request for a Planned Unit Development "PUD" Zoning and Preliminary Master Plan / Final Master Plan (PMP / FMP) on or before August 18, 2025, with no objections. Therefore, staff recommends **APPROVAL** of the request for "PUD" Zoning and PMP / FMP for Ordinance No. 2025-67.

Finance Director's Comments:
N/A

Procurement Director's Comments:
N/A

City Manager's Comments:
City Manager recommends approva

City Council Action:
11/13/25 - Final Action
9/11/25- Motion to approve by Paul. Seconded by Fletcher. Passed 4-0. Gilbert was not present.

Attachments:
1. 1. PUD24-00005 Harvest Grove (fka Nona Townhomes) PUD_Staff Report 11.13.25 CC
2. 2. PUD24-00005 ORDINANCE City Rev_11.13.25 CC (MB)
3. 3. PUD24-00005 PLANS.0802025
4. 4. PUD24-00005 School Capacity Reports
5. 5. PUD24-00005 Environmental Site Assessment
6. 6. PUD24-00005 Harvest Grove Traffic Impact Analysis
7. 7. PUD24-00005 Harvest Grove Elevations

City Council Staff Report

Meeting Date: November 13, 2025

DRC Case No. /Ord. No.
PUD24-00005 / 2025-67

Type of Application
"PUD" Planned Unit Development Zoning/ Preliminary Master Plan / Final Master Plan (PUD PMP/FMP)

Case Name
Harvest Grove PUD (fka Nona Townhomes)

Applicant/Agent
Lennar Homes; Rob Bonin/Hanson Walter and Associates, Inc.; Cameron Hindle, P.E.

Owners
Arma Investments LP / Walter Malukiewicz & Christine M Novy

Address/Location
North of East Irlo Bronson Memorial Highway, east of South Narcoossee Road, south of Lillian Lee Road, and west of Puffin Road

Parcel ID No(s).
05-26-31-4950-0001-0760, 05-26-31-4950-0001-0850, 05-26-31-4950-0001-0920, and 05-26-31-4950-0001-0690

Total Land Area
+/- 17.35 acres

Project Planner
Marcos Bastian, AICP
Community Development Deputy Director



Figure 1 – Aerial Map

Request

The applicant is requesting consideration of a "PUD" - Planned Unit Development Zoning District and Preliminary Master Plan / Final Maste Plan (PMP / FMP) for approximately +/- 17.35 acres of land, known as Harvest Grove PUD, as shown in **Figure 1** above.

Background

The subject property is generally located north of East Irlo Bronson Memorial Highway, east of South Narcoossee Road, south of Lillian Lee Road, and west of Puffin Road. As proposed, the development will support residential infill in an appropriate area with existing infrastructure, compatible residential uses, and access to arterial roadways. The proposed development program will provide for infill residential development at a density of 7.97 dwelling units per acre (DU/Ac.) compatible with the underlying Future Land Use of Medium Density Residential that allows for a maximum of 10 DU/Ac.

The property was annexed into the City of St. Cloud by Ordinance No. 2025-12 and received a Future Land Use designation of Medium Density Residential by Ordinance 2025-13 to allow to facilitate the development of a 136 Single-Family Townhome units community. Concurrently, the applicant is requesting consideration of a Preliminary Subdivision Plan / Final Master Plan (PSP25-00002) for the creation of a 136-unit subdivision with 60 front-loaded units and 76 rear-loaded units with 0.28 acres of right-of-way dedication along Puffin Road.

Project Description

The proposed development will provide a transition between the surrounding single-family home neighborhoods to the north, east, and west and the proposed apartments and commercial developments to the south.

Harvest Grove PUD is a new townhome development that aims to complement neighboring residential properties and businesses in the eastern zone of the City. This development will provide a transitional Medium Density Residential between a Highway Business Corridor and Low-Density Residential neighborhoods. The PUD will provide an additional 136 Single-Family Townhome units for the surrounding area. These units will be compatible with the size, architecture, and pricing structure of the existing subdivision and duplex style single-family attached units in the surrounding area with an estimated price range of $330,000 - $370,000, and a projected to be built in one phase.

The stormwater management pond will be in the northeast corner of the subject property with a playground, dog park, and a swing set and amenitized with a walking trail, landscape, and benches. The development provides both passive and active recreation space, including a playground, swing set, dog park, and a linear park along Puffin Road to provide a connected trail network to nearby neighborhoods and commercial areas, with benches and workout stations throughout open space features and surrounding the stormwater pond.

The Harvest Grove PUD will be developed in a single phase with an expected buildout year of 2028. The recreation will be completed for the residents at time of the last Certificate of Occupancy in the development. The new residents of the proposed 136 Single-Family Townhome units will be a part of a Homeowner's Association and will be entitled to the use of the recreational facilities within subject property. In addition, the applicant will provide the construction of Puffin Road from the proposed development's south property line to the north to Lillian Lee Road.

The list below outlines the improvements provided within the proposed development that meet and exceed the requirements:

1. The project will utilize Florida Friendly Landscaping standards and enhanced buffers with a level of mature vegetation at planting.
2. Enhanced landscaping to be installed along Puffin Road screens the development and homesites from the roadway view.
3. Enhanced buffer around the entire perimeter at a 25' minimum from the property line to any unit lot line.
4. Enhanced building separation between the townhome units. The minimum separation requirement is 10 feet and the design separation provided is 15 feet.
5. Community safety will be enhanced via looped, connected internal streets for ease of emergency access without the need for hammerheads or turn arounds.
6. Pedestrian and bicycle-friendly amenities throughout the site and a linear park along Puffin Road provide access and connectivity to amenities, public streets, and nearby local businesses and grocery stores.
7. Open Space is in excess by 22% of the minimum open space requirement. The required open space is 4.27 acres, and the development contains 5.21 acres of open space. This is an excess

of 0.94 acres above the minimum.

8. Building elevations wrap around architectural standards on secondary facades and alternate to create visual variety in the community.
9. All internal streets will be privately maintained to avoid adding additional costs to the city residents for maintenance.
10. Provides enhanced amenities for the community:
    a. 0.36 acres of trails (not including sidewalks in the right of way)
    b. Work out stations located along the trail
    c. Benches located along the trail and pond
    d. Large and small dog park
    e. Playground
    f. Swing set
    g. Connected sidewalks within the community to the on-site trail network
    h. Sidewalk connections to existing and proposed developments will allow
    i. walkability to nearby commercial, thereby reducing vehicular trips.

Compatibility with Surrounding Development

The following table summarizes adjacent Future Land Use designations, Zoning districts and existing uses.

TABLE 2: ZONING & FUTURE LAND USE OF NEIGHBORING PROPERTIES			
Direction	***Zoning***	***Future Land Use***	***Existing Land Use***
North	R-2	Medium Density Residential	Vacant
East	"PUD" Planned Unit Development and "A"	Low Density Residential	Single Family-Improved
West	"PUD" Planned Unit Development	Medium Density Residential	Single Family-Improved
South	"HB" Highway Business	Commercial	Vacant

Figures 2 & 3, below, depict the current Future Land Use and Zoning districts within the City.



Figure 2 – Future Land Use Map

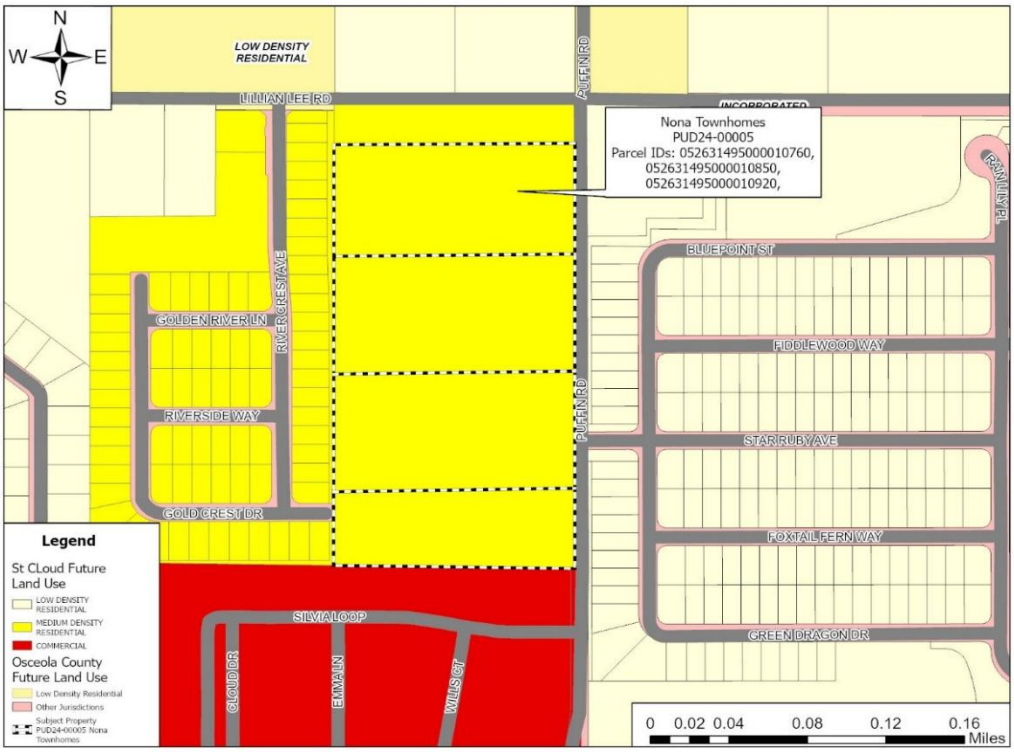


Figure 3 – Zoning Map

Public Notice

Notice of Public Hearing was mailed to property owners within 500 feet of the subject property and was advertised as required by State Statutes. No oral or written comments were received by staff from the public at the time of this report's distribution. Additional public comment may be available at the public hearing.

Findings

Staff has reviewed the applicant's response to the 16 Required Findings of Section 3.4.3.C.2.a of the Land Development Code. The applicant's responses follow the **bolded** LDC language, and staff's comments follow in *italics*:

1. **The proposed change is contrary to the established land use pattern;**

   "The proposed plan includes a zoning to PUD and a future land use as Medium Density Residential (MDR). We are proposing a residential neighborhood which fits into the established land use pattern."

   The proposed PUD PMP / FMP is compatible with the established land use pattern and future development for the area.

2. **The proposed change would create an isolated district unrelated to the adjacent and nearby districts;**

   "The proposed change will not create an isolated district. Surrounding our property are existing neighborhoods zoned LDR and directly to the south is an apartment project zoned HB. This is a good buffer between the LDR and higher intensity HB."

   The proposed PUD PMP / FMP will not create an isolated district, the surrounding area is comprised of single family detached housing, with PUD zoning and Low (4 DU/Ac) and Medium Density Residential (10 DU/A) Future Land Use designations. The proposed density of 7.97 DU/Ac is compatible with the surrounding area.

3. **The proposed change would materially alter the population density pattern and thereby increase or overtax the load on public facilities such as schools, utilities, streets, etc.;**

   "The proposed project will not materially alter the population density. During the process with the Master plan and PSP the utilities, traffic and school reports will be provided to show the project does not cause any hardships for other citizens."

   The proposed change would not alter the population density pattern or public facilities, As Medium Density Residential future land use already exists to the west. The school capacity report stated that the proposed impacts would be determined during Site Development Plan review. The applicant provided a water/sewer availability from Toho Water Authority which references that potable water is available to service the subject property.

4. **Existing district boundaries are illogically drawn in relation to existing conditions on the property proposed for change;**

   "The project fits nicely into the district boundaries. There are 4 parcels with 3 of them previously being annexed into the city. We are adding an additional parcel to the city which will increase the City's tax collection."

   The existing district boundary is not illogically drawn since the proposed development will support the surrounding area. Figure 2 depicts that most of the land use surrounding the

subject property are for residential development. Although the existing Zoning allows for the proposed use, this PUD proposes a mix of townhome style, and flexibility thus the need for a PUD PMP / FMP .

5. **The proposed change would be contrary to the land use plan and would have an adverse effect on the comprehensive plan;**

   "The surrounding future land use are LDR, MDR, and commercial. The proposed land use of MDR fits perfectly in this scenario. It also provides a buffer from the apartments to the single family homes."

   The proposed PUD PMP / FMP is compatible with the comprehensive plan and is consistent with the adjacent zoning districts.

6. **Change or changing conditions make the passage of the proposed amendment necessary;**

   "As our development landscape changes we have to adapt. the proposed zoning and land use does not allow enough density to make the project feasible. With the proposed plan it will allow the developer to provide a great community."

   The proposed PUD PMP / FMP allow for a more efficient use of land reducing urban sprawl and preserving natural areas. A Phase 1 Environmental Site Assessment (ESA) was conducted in 2024 in conformance with 40 CFR 312, Standards for Conducting All Appropriate Inquiries, and in general conformance with ASTM Practice E1527-21 by SCS Engineers (See Exhibit C). No negative environmental impacts or Recognized Environmental Conditions (REC) were found on the subject property. To allow the proposed development the PUD zoning is necessary.

7. **The proposed change will adversely influence living conditions in the neighborhood;**

   "This is not true. This development will provide walkability to the commercial properties along 192 with the construction of Puffin Road. Also, we will be providing enhanced amenities for the community members."

   The proposed PUD PMP / FMP will not adversely influence living conditions in the neighborhood and is consistent with the intent of the Comprehensive Plan, Transportation and Mobility Plan Master Plan and Envision St. Cloud. The proposed density is compatible with neighboring properties with similar land use and zoning categories such as Rivercrest at Narcoossee and Canopy Walk Phase 2. Additional infrastructure improvements will be evaluated at the time of the Subdivision Development process.

8. **The proposed change will create or excessively increase traffic congestion or otherwise affect public safety;**

   "The project will add additional trips to the area but our TIA will provide calculations that the proposed development will not excessively increase traffic congestion and that all roads and intersections work adequately."

   The development is proposed to be served by six (6) access locations. Five (5) full access driveways are proposed on Puffin Road and one (1) cross connection is proposed into the adjacent Rivercrest at Narcoossee neighborhood. The analysis was conducted in accordance with a methodology approved by City of St. Cloud. Data used in the analysis consisted of site plan/development information provided by the project engineers, AM and PM peak hour intersection traffic counts obtained by Traffic & Mobility Consultants LLC (TMC), and roadway capacities obtained from the Osceola County Roadway Network Capacity Report.

Other pertinent traffic data was also obtained from the Florida Department of Transportation.

Table 1
Trip Generation Analysis

ITE Code	Land Use	Size	Daily		AM Peak Hour				PM Peak Hour			
			Rate	Trips	Rate	Total	Enter	Exit	Rate	Total	Enter	Exit
215	Single-Family Attached (Townhomes)	141 DU	7.26	1,024	0.48	68	17	51	0.57	81	48	33

Trip generation analysis based on ITE Trip Generation Manual, 11th Edition

The analysis included a determination of project trip generation, a review of existing and projected roadway capacity, intersection capacity, and access driveways. The results of the traffic analysis are summarized as follows:

- *The proposed development is projected to generate 1,024 new daily trips, of which 68 trips occur during the AM peak hour and 81 trips occur during the PM peak hour.*
- *Analysis of roadway segment capacity reveals that the following segments are projected to exceed the available capacity due to background traffic and the project impacts on these segments are considered insignificant.*
  - *Hickory Tree Road from US 192 to Nolte Road (project trips are 0.2% of the roadway capacity)*
  - *Narcoossee Road from Rummell Road to 10th Street (project trips are 0.6% of the roadway capacity)*
  - *Narcoossee Road from 10th Street to US 192 (project trips contribute 0.2% of the roadway capacity)*
- *All other roadway segments are projected to operate adequately at buildout.*
- *Some of the study intersections are currently operating with delays and are projected to continue to operate deficiently. The project traffic is not projected to adversely deteriorate traffic flow at these intersections as the project trips are less than 1% of the of the total intersection traffic.*
- *No auxiliary lanes are required at the project access driveways.*

The applicant has provided a Tier 1 Traffic Impact Analysis (See Exhibit D). A more in-depth review of the potential transportation impact will take place upon its receipt during the PUD Subdivision Construction Plan review.

9. The proposed change will create a drainage problem;

"The proposed project will include an on-site pond that will reduce the amount of flow compared to the pre-development condition. Also, we will be taking in the drainage of Puffin Road which currently does not have any drainage improvements."

Pursuant to Article 6 of the Land Development Code, stormwater management systems shall be provided for all areas of the development and accommodate the runoff that flows into or across the development area without additional flooding of any other lands. Any proposed stormwater system will be reviewed during the Subdivision Construction Plan process.

10. The proposed change will seriously reduce light or air to adjacent areas;
"The proposed development will not reduce light or air to the adjacent areas. The project will have a max building height of two stories and will provide photometric plans showing no impacts to adjacent properties."

Development shall meet the design standards required during review of the PUD Subdivision Construction Plan to mitigate any possible impacts.

11. The proposed change will adversely affect property values in the adjacent area;

"Property valves will not decrease due to the proposed zoning and land use proposed. Properties are compared to similar properties on an appraisal. It will also provide a complementary product type to the area for different home buyers."

The proposed change should not adversely affect property values in the adjacent area. An Economic Impact Analysis may be required at the time of submittal of the PUD Subdivision Construction Plan.

12. The proposed change will be a deterrent to the improvement or development of adjacent property in accordance with existing regulations;

"The proposed development will follow all city codes and will not impact adjacent developments. The project will provide additional roadway connectivity for better traffic flow."

The proposed PUD PMP / FMP is consistent with the development of the adjacent properties and the Envision St. Cloud Citywide Master Plan vision for new neighborhoods in the area. One (1) cross connection is proposed into the adjacent Rivercrest at Narcoossee neighborhood. Future development will be required to provide connectivity and road improvements that will enhance accessibility, economic development, and recreational opportunities in the area, as necessary.

13. The proposed change will constitute a grant of special privilege to an individual owner as contrasted with the public welfare;

"The proposed change is not granting a special privilege to the owner of the property. The proposed changes fit into the current developments in the area."

The proposed PUD PMP / FMP does not grant special privilege to an individual owner, developer, or contrast with public welfare.

14. There are substantial reasons why a reasonable use of property cannot be accomplished under existing zoning;

"One of the parcels is an annexation however, the others are currently zoned R-1 B, which does not provide a high enough density to make the financials work. Also St. Cloud is one of the fastest growing cities and they will need homes for the additional residents."

The proposed PUD PMP / FMP would support the density of the proposed Medium Density Residential Future Land Use designation allowing for the provision of infill residential development at compatible density with adjacent residential PUDs, providing common open space areas, and community amenities consistent with the policies in the Comprehensive Plan.

15. Whether the change suggested is out of scale with the needs of the neighborhood or the city;

"This project will provide homes for a growing population at an afforable price. The development will provide on site enhanced amenties as well as an improved Puffin Road. It

also allows for fewer traffic trips due to the walkability to nearby commercial development."

The proposed PUD zoning/ Preliminary Master Plan is consistent with the development in the surrounding area, and it will benefit the City by reducing the deficit of Medium Density Residential and providing compatible infill residential development, as identified in the Comprehensive Plan.

16. **It is impossible to find other adequate sites in the city for the proposed use in districts already zoned for such use.**

"There are not many PUD zoned areas to move this development to. We have worked with the City staff to create a development that will meet the needs of the area and provide a great product the City will be proud of."

There are other areas of the City that are developed in which the proposed Future Land Use already exists, however, the proposed location provides an opportunity for residential infill development that is suitable to accommodate the residential density of the proposed project consistent with the policies in the Comprehensive Plan.

Staff Recommendation

Staff has reviewed the 6 Required Findings of **PUD** Section 3.9.5 of the Land Development Code.

The LDC requirements are in **bold text** and staff responses are in *italicized text.*

1. **The requirements of unified control and agreement set forth herein.**

   The applicant has provided evidence of unified control.

2. **The locational standards set forth herein.**

   The project has demonstrated compliance with locational standards as defined in the LDC.

3. **The internal PUD standards set forth herein.**

   *The project has demonstrated compliance with the internal standards as required in this PUD PMP / FMP process including access, internal lots and frontage, off-street parking and off-street requirements, underground facilities, dedications, open space such as the conditions of approval stated at the end of this report, general desig*n, *and connectivity.*

4. **The tract for the proposed PUD is suitable in terms of its relationships to the city comprehensive plan and that the area surrounding the proposed PUD can continue to be developed in coordination and substantial compatibility with the PUD proposed.**

   The property is suitable for PUD development, as guided by the City's Comprehensive Plan. Cross-connection is provided to adjacent development.

5. **That the desirable modifications of general zoning or PUD regulations as applied to the particular case, justify such modification of regulations and meet to at least an equivalent degree the regulations modified, based on the design and amenities incorporated in the site development plan.**

   The modifications to traditional zoning allowances in other districts are justified and are equivalent to, if not improvements upon, those traditional standards. The development will also provide for infill residential development at a density desirable within the area.

6. **That increased open space is provided for the occupants of the proposed PUD and the general public, and desirable natural features indigenous to the site are preserved in the**

development plan presented.

The PMP / FMP *proposes an additional +/- 1.47 acres of open space. The proposed development will utilize the stormwater management pond to create a passive recreation amenity with a pedestrian trail and a connected sidewalk system.*

School Capacity Report

The District has a history of working closely with the County and two municipalities to alleviate school capacity issues created by expanded residential development. The School District of Osceola County reserves its right to ensure proper mitigation of any impact on school capacity and the collection of Educational System Impact Fees. See Exhibit B. for further information.

Consistency With Strategic Plan Goals:

The proposed Zoning Map Preliminary Master Plan meets the intent of the following City of St. Cloud Strategic Goals:

- ***High-Performing Government:*** *Focus on the continuity and sustainability of core public services.*

Staff Recommendation

Staff reviewed this request for a Planned Unit Development "PUD" Zoning and Preliminary Master Plan / Final Master Plan (PMP / FMP) on or before August 18, 2025, with no objections. Therefore, staff recommends **APPROVAL** of the request for "PUD" Zoning and PMP / FMP for Ordinance No. 2025-67.

Planning Commission Recommendation

On October 21, 2025, the Planning Commission - Motion to recommend approval by Grigsby. Seconded by Douglas. Passed 3-2. Lantry and Alexander voted nay.

City Council Requested Action

On September 11, 2025, the City Council - Motion to approve by Paul. Seconded by Fletcher. Passed 4-0. Gilbert was not present.

Per Land Development Code Section 1.1.7 – the City Council, at its regularly scheduled meeting, shall review the Final Master Plan. Based on the information generated and the comments made during the development review, the City Council shall approve, disapprove or approve subject to stated conditions. Approval of the Final Master Plan shall authorize review for approval of the Subdivision Construction Plans by the Development Review Committee as outlined in section 2.4.4.

Attachments

- Ordinance No. 2025-67
- Preliminary Master Plan
- School Capacity Report
- Phase 1 Environmental Site Assessment
- Tier 1 Traffic Impact Analysis
- Elevations

RETURN TO:
CITY OF ST. CLOUD
DEPT. OF COMMUNITY DEVELOPMENT
1300 9TH STREET
ST. CLOUD, FL 34769

ORDINANCE NO. 2025-67

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, PROVIDING FOR THE ZONING AMENDMENT OF THE ZONING MAP OF THE LAND DEVELOPMENT CODE OF THE CITY OF ST. CLOUD, FLORIDA, SPECIFICALLY CHANGING THE ZONING DESIGNATION OF APPROXIMATELY +/-17.35 ACRES IDENTIFIED AS HARVEST GROVE PUD, PROJECT #PUD24-00005, FROM "R-1B" SINGLE FAMILY DWELLING TO "PUD" PLANNED UNIT DEVELOPMENT PRELIMINARY MASTER PLAN / FINAL MASTER PLAN (PUD PMP / FMP), GENERALLY LOCATED NORTH OF EAST IRLO BRONSON MEMORIAL HIGHWAY, EAST OF SOUTH NARCOOSSEE ROAD, SOUTH OF LILLIAN LEE ROAD, AND WEST OF PUFFIN ROAD; PROVIDING FOR ENTERING THE DESIGNATION ON THE OFFICIAL ZONING MAP, FILING OF THE PLANNING COMMISSION RECOMMENDATION AND PROOF OF PUBLICATION, SEVERABILITY, AND EFFECTIVE DATE.

WHEREAS, zoning districts are required to be consistent with Comprehensive Plan of the City of St. Cloud; and,

WHEREAS, the proposed zoning is consistent with the existing Future Land Use designation of "Medium Density Residential"; and,

WHEREAS, the property described below is less than five percent (5%) of the total land area of the City of St. Cloud; and,

WHEREAS, the City Council has received the recommendation of the Planning Commission dated October 21, 2025; and,

WHEREAS, the City Council has held a Public Hearing on this matter after public notice has been provided, as required by law; and,

WHEREAS, it is in the best interest of the City of St. Cloud and its citizens that the proposed rezoning be approved.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of St. Cloud, Florida, as follows:

SECTION 1:

That Ordinance No. 87-HH of the City of St. Cloud, Florida, passed and adopted October 1, 1987, and any amendments to the ordinance, being the Land Development Code of the City of St. Cloud, Florida, is hereby amended to include and designate on the Official Zoning Map a "PUD" - Planned Unit Development zoning district classification for the property described below and as shown on Exhibit "A":

Parcels #05-26-31-4950-0001-0690, 05-26-31-4950-0001-0760, 05-26-31-4950-0001-0850, and 05-26-31-4950-0001-0920

LEGAL DESCRIPTION:

PARCEL 1:

LOTS 76, 85 AND 92, THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION OF SECTION 5, TOWNSHIP 26 SOUTH, RANGE 31 EAST, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK B, PAGE 22, PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA.

TOGETHER WITH A 1982 SKYLINE MOBILE HOME WITH ID. NO. 54630245EA AND ID. NO. 54630245EB.

PARCEL 2:

LOT 69, LESS AND EXCEPT THE NORTH 17.5 FEET THEREOF, THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION OF SECTION 5, TOWNSHIP 26 SOUTH, RANGE 31 EAST, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK B, PAGE 22, PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA.

SECTION 2:

The presentments and plans submitted pursuant Section 2.5.2 of the City of St. Cloud Land Development Code and assigned Case # PUD24-00005 are hereby incorporated within as part of the approval of rezoning to “PUD” and include the location of parcels and tracts located within the PUD Preliminary Master Plan/Final Master Plan (PMP/FMP) as identified in Exhibit “B” attached hereto.

SECTION 3:

A. For the purpose of regulating the development of the property within the PUD, the following will be used to regulate zoning and land use:

1. General Purpose and Character

   Harvest Grove PUD is proposed to be a residential development to include medium density single-family attached residential uses with a mixture of front load and rear load townhome products.

2. The following regulations shall govern the PUD:

   FUTURE LAND USE: MEDIUM DENSITY RESIDENTIAL

PROPOSED ZONING:	RESIDENTIAL PUD
GROSS ACREAGE:	17.35 ACRES
NET ACREAGE (Minus Puffin Road Dedication)	17.06 ACRES
MAXIMUM ALLOWABLE UNITS	170 UNITS
MAXIMUM ALLOWABLE DENSITY	10 UNITS/ACRE
PROPOSED NUMBER OF UNITS:	136 TOWNHOMES (SINGLE-FAMILY ATTACHED)
PROPOSED NET DENSITY	7.97 UNITS/ACRE

3. Open Space

The community will provide both passive and active recreation space, including a playground, swing set, dog park, linear park along Puffin Road to provide a connected trail network to nearby neighborhoods and commercial areas, with benches and workout stations throughout open space features and surrounding the stormwater pond.

OPEN SPACE REQUIRED:	25% (4.27 ACRES)
OPEN SPACE PROVIDED:	30.54% (5.21 ACRES)

4. Development Program

Use	Total Units
Single-Family Attached (Townhomes)	136

5. General Data

A. Permitted Residential Standards:

1. Permitted Uses –

a. Single-family attached Townhomes with minimum (2) car attached front- and rear-loaded garages.

b. Accessory structures and ancillary uses customarily associated with the permitted use as regulated by the City of St. Cloud Land Development Code.

c. Home occupations in compliance with the City of St. Cloud Land Development Code.

d. Community recreation areas (residents only) when approved as part of this PUD PMP/FMP, Preliminary Subdivision Plan and/or Subdivision Construction Plans.

e. Areas designated on the PUD PMP/FMP, Final Master Plan Preliminary, Subdivision Plan and/or Subdivision Construction Plans as reserved for potential public uses yet to be determined may be used (without implied limitation) for future City roadways, utilities corridor, and conservation.

f. Model sales center office or use of the first units receiving a certificate of occupancy. If a separate sales center office is constructed it shall be subject to

separate Site Development Plan approval and architectural review by the Development Review Committee and shall be removed no later than when the last unit receives a building permit.

g. Construction office trailers subject to separate Site Development Plan approval and architectural review by the Development Review Committee and removed prior to the first unit receives the certificate of occupancy. The pre-construction sales office, model sales center and construction office trailer permitted use shall require a separate Mini Site Plan review and shall be landscaped and designed to follow the design criteria of the Land Development Code and be ADA accessible, including paved walkways and parking space that are dust free. The remaining non-ADA parking and drive isles shall be comprised of mulch or stone.

2. Prohibited Uses – Any use not listed as a permitted use shall be considered prohibited use, including:

   a. Billboards and pole signs.

   b. Communication towers, including telecommunication monopoles, excluding structures for the City's wireless infrastructure.

   c. Conversion of covered front porches to enclosed porches.

   d. Residential recovery centers.

   e. No parking on streets or alleys, except in off-roadway parking spaces approved as part of the PUD PMP/FMP and/or Subdivision Construction Plans.

3. Residential Development Standards

SINGLE-FAMILY REAR LOAD ATTACHED DWELLINGS	
MINIMUM LOT WIDTH	Streetside Corner: 30 feet Building Perimeter Interior: 27.5 feet Interior: 20 feet
MINIMUM LIVING AREA	1,750 square feet
MAXIMUM LOT COVERAGE	75%
MAXIMUM BUILDING HEIGHT	30 feet
SINGLE-FAMILY FRONT LOAD ATTACHED DWELLINGS	
MINIMUM LOT WIDTH	Streetside Corner: 35 feet Building Perimeter Interior: 32.5 feet Interior: 25 feet

MINIMUM LIVING AREA	1,800 square feet
MAXIMUM LOT COVERAGE	75%
MAXIMUM BUILDING HEIGHT	30 feet

MINIMUM BUILDING SETBACKS

FRONT LOAD TOWNHOME FRONT (GARAGE)	25 feet
FRONT LOAD TOWNHOME FRONT (BUILDING)	10 feet
FRONT LOAD TOWNHOME REAR	10 feet
REAR LOAD TOWNHOME FRONT	10 feet
REAR LOAD ALLEY	20 feet
INTERNAL SIDE	0-foot [(i)]
PERMITER UNIT SIDE	7.5 feet
STREET SIDE	10 feet
MINIMUM SEPARATION BETWEEN BUILDINGS	15 feet
ACCESSORY STRUCTURE	5 feet

PUD PERIMETER REQUIREMENT

ENHANCED LANDSCAPE LINEAR PARK	35-feet minimum along east property line adjacent to Puffin Road
ENHANCED LANDSCAPE TRACT	25-feet minimum along west, north, and south property lines

NOTES:

i. 0-foot setbacks pertain to internal dwelling units for single-family attached products.

ii. All setbacks must be measured from the property line.

iii. Perimeter buffers are not required per the Land Development Code for the proposed land use of single family to any adjacent use. Enhanced perimeter landscaped areas will be developed in accordance with Section B.5 of this ordinance.

4. Housing Types

    a. a. Single-family attached Townhomes with minimum (2) car attached front- and rear-loaded garages are the only residential products proposed within the Harvest Grove PUD.

5. Phased Development

    a. This PUD PMP/FMP will be a single-phase development. Open space, recreational amenities, and pedestrian access around stormwater ponds will be provided with the project.

B. Development Conditions – The following conditions shall be placed on the rezoning of the above-described property:

1. Connectivity

    a. This PUD PMP/FMP must demonstrate stub-out road network connections up to the property line and aligned with adjacent development pursuant to the Comprehensive Plan and the City of St. Cloud Land Development Code.

2. Architectural Standards

    a. Architectural elevations and façades shall vary with the intent of preventing adjacent units from looking similar to one another. Based on the type of building(s) or land uses(s) being developed, the following shall apply:

        i. The building type (model), exterior paint color, and elevation (all three) shall not match adjacent homes, nor the homes located directly or diagonally across the street and must be consistent with approved site layout.

    b. The front or primary entrance door of a dwelling shall be located on the façade facing the adjacent public or private street, common area, or courtyards.

    c. Façade classifications. For the purposes of building siting and building form regulations, façades of a building shall be classified as follows:

        i. A façade that has a primary entrance door is a primary façade.

        ii. If the dwelling is located on a corner lot that faces two public streets and the side façade does not have a primary entrance, that side façade is the secondary façade.

        iii. If the dwelling façade with the primary entrance faces an adjacent public or private street, common area, or a courtyard and the garage faces an alley or a private internal street, the façade where the garage is located is a secondary façade, and the façade with the primary entrance is a primary façade. If the garage faces a public or private street, the garage façade is a primary façade in addition to the primary entrance door (two primary façades).

d. Garages

i. Front Loaded Single-family attached dwelling units

1) Lots with a 25-foot lot width, measured along the street line, shall meet the parking requirements in the LDC by providing a two-car garage and a two-car driveway. Architectural and landscape elements shall be used when a front-loading garage comprises more than 50 percent of the primary facade. A hedge row provision, which is 2-foot at planting, must be included on the front or side of the homesite lot to enhance the street view and provide relief from garage uniformity.

ii. Narrow lots or site area.

1) Off-street parking, including driveways and garages shall be accessed from an alley or side street, if the lot width for a single-family detached dwelling unit is less than 25 feet as measured along the street line.

e. Architectural elements and variation shall not be restricted to a single façade. The sides of a building designated either a primary or secondary façade shall display a balanced level of quality and architectural interest consistent with sound and generally accepted architectural practices and principles and adhere to the articulation elements requirements below.

i. Front entrances shall be clearly defined with the use of architectural features including, but not limited to, porticos, recessed/projected access, stairs, columns, canopies, different material, or treatment.

f. Buildings shall contain a minimum number of specified articulation elements (which can be chosen from the list in subsection g. below) based on the facade classification, as follows:

i. Primary façade: Three (3) articulation elements.

ii. Secondary façade: Two (2) articulation elements.

iii. Rear or side façade (not designated as a secondary façade): One (1) articulation element.

iv. Rear façade facing an adjacent right-of-way, street, alley, or other public realm space: Two (2) articulation elements.

g. Articulation elements. The following is a list of articulation elements that can be chosen to satisfy the requirements of sub part f. above.

i. Arched, gabled, stepped, or decorative parapet with cornice over building entrances, integrated with the building's massing and style.

ii. Canopies, balconies, patios, porches or porticos, bay windows, steps, ornamental guardrails, porch railing, pergolas, columns, all of which shall be integrated with the building's massing and style.

iii. Vertical or horizontal modulation through recesses and projections that create variation in the wall plane of a particular facade.

iv. Peaked roof forms used as wall articulation.

v. Overhangs or other roof treatments that provide shade and break the vertical plane, a minimum of three (3) feet deep that cover at least twenty (20) percent of the horizontal length of the facade.

vi. Ornamental and structural articulations that are integrated into the building structure, consistent with the building's mass and scale. Vertical architectural treatments shall have a minimum width of twenty (20) inches and a projection or recession of a minimum of twelve (12) inches in depth.

vii. Articulation elements that reflect the individuality of each unit including, but not limited to, recesses, additional decorative features, or change of material and/or change of color associated with difference in facade plane, consistent with sound and generally accepted architectural practices and principles.

viii. If a rear façade faces an adjacent right-of-way, street, or other public realm space requiring two (2) articulation elements, enhanced perimeter landscape is permissible as one (1) of the two (2) required articulation elements. The perimeter landscaped area shall be a minimum five (5) feet wide and shall include groundcover and shrubs/vegetation that provide dense screening with a mature height of six (6) feet at a minimum, and one (l) understory tree or clusters of three (3) palm trees for each twenty-five (25) feet , or fraction thereof, of the linear building façade.

ix. Any other treatment that the approving authority determines to clearly and convincingly be consistent with the intent of this section and is consistent with sound and generally accepted land use planning practices and principles.

h. Roofing forms, slopes, details, materials, and overall design shall be compatible with the overall style, mass, scale, and character of the structure.

i. Roofs shall contain a minimum number of roof modulation elements (which can be chosen from the list in subsection j. below) based on façade classification as follows:

i. Primary façade: Two (2) elements.

ii. Secondary façade: One (1) element.

j. Roof modulation elements. The following is the list of articulation elements that can be chosen to satisfy the requirements of subpart i. above.

i. Uninterrupted roofline along the eave between roof modulation elements shall be no more than forty (40) feet.

ii. Decorative parapets that are a minimum of three (3) feet in height above the finished roof.

iii. Multiple peaks and/or roof planes.

iv. A sloping roof with an average pitch of 3:12 or greater.

v. Extension of window or façade elements up into the roof area.

vi. Distinctive roof forms covering each building mass.

vii. Same roof form with a different orientation of the ridge elements.

viii. Same roof form with same orientation, but the roof has a minimum change in elevation of two point five (2.5) feet between each roof level.

ix. Any other treatment that the approving authority determines to be consistent with the intent of this Subsection and is consistent with sound and generally accepted land use planning and architecture practices and principles.

k. Doors, windows, and other openings in a building exterior façade shall comply with all of the following:

i. Fenestration elements (doors, windows, and openings) shall be appropriately sized for the scale and style of the building on which they are located.

ii. Windows, doors, and/or openings shall occupy a minimum of fifteen (15) percent of the area of the primary façade and ten (10) percent of the area of the secondary façade or façades that front a street, park, plaza, or on-site courtyard.

iii. A garage door can be creditable as fenestration element if providing a minimum of twenty (20) percent of its area as windows.

iv. Windows shall provide daylighting into the building.

v. Buildings using large amounts of glass shall divide the glass into smaller panels achieving proportions emphasizing verticality.

vi. Windows and doors shall be accentuated through measures such as:

1) Adding trim/sills and lintels or other similar treatment,

2) Providing shutters or awnings,

3) Framing through the use of façade materials,

4) Use of bay windows, and/or

5) Recessing the window.

vii. Where decorative shutters are used to accentuate windows and/or doors, said shutters shall be scaled and affixed to have the appearance of functioning shutters.

l. Materials:

i. Materials shall be varied and contrasting either to differentiate dwelling units or to differentiate specific portions of dwelling units.

ii. Material treatment shall be consistent in all building façades within a given lot or development and shall be complementary to one another and appropriate for the architectural style.

iii. The minimum number of building materials used on a primary façade and secondary façade shall be two (2), excluding fenestration, trims, and decorative elements.

iv. Changes in material shall generally occur when there is a change in the plane of the façade. The change in material is encouraged to occur on inside corners of the building.

v. If wrapping around corners is used as an architectural element, brick and stone materials shall wrap around corners to give an appearance of structural function and minimize a veneer appearance.

vi. If brick and stone veneer is used as an architectural element, brick and stone veneer materials shall be mortared to give the appearance of a structural function.

vii. Permissible façade materials. High-quality façade materials, including but not limited to: brick, stone, wood panel (including painted or stained lap horizontal siding, vertical board, batten-wood siding) and stucco.

viii. Prohibited façade materials. Prohibited façade materials include: untreated concrete block, plywood, unfinished lumber aluminum, textured T1-11, corrugated fiberglass, sheet metal or tin siding and any other materials determined by the city to be of similar nature or effect.

m. Colors and finishes shall comply with all of the following:

i. Prohibited colors and finishes. The following are prohibited on the exterior of any building, which are found by the city to be one or more of the following:

1) Colors that fluoresce under ultra-violet (UV) or black light;

2) Colors and finishes that are pearlescent or excessively reflective in nature.

ii. Maximum number of colors. A maximum of three (3) colors may be used on the exterior walls of any building plus two (2) additional colors for trim/cornice work.

iii. Natural materials. Unpainted materials such as brick and stone do not count as colors.

n. Service areas.

i. Common refuse/recycling collection containers (garbage dumpsters) shall be located in areas that are not visible from public streets by pedestrians.

ii. Design requirements for common refuse/recycling collection containers (garbage dumpsters).

1) Refuse/recycling collection containers (garbage dumpsters) shall be structurally screened.

2) Screening shall be a minimum one (1) foot greater in height than the element being screened.

3) Structural screening shall be consistent with the architectural elements, materials, and colors of the principal structure and shall completely obstruct the view of the element being screened.

4) Whenever practicable, these areas and equipment shall be integrated into the main structure.

o. Mechanical equipment shall comply with all of the following:

i. Location. Mechanical equipment shall be placed on the roof, on the side, or in the rear of each building. Mechanical equipment may project into the required side yard setbacks provided such units are not placed outside the property boundaries and shall be installed with a minimum of ten feet stagger to provide for drainage and accessibility.

ii. Roof-top equipment screening requirements.

1) Roof-top mechanical equipment shall be completely screened from all ground level views by a parapet

wall or other architectural feature, such feature shall be architecturally integrated to the building.

2) The parapet screen height shall be at least one (1) foot higher than the mechanical equipment being screened. In exceptional cases, if the applicant cannot meet this requirement, the applicant may propose a different screening height if demonstrated by the line of sight that the equipment is not visible from the pedestrian view, in which case it shall not be considered a deviation.

3) Structural screening shall be consistent with the architectural elements, materials and colors of the principal structure. Whenever practicable, these areas and equipment shall be integrated into the main structure.

iii. Ground-mounted equipment screening requirements.

1) Ground-mounted equipment shall not be visible from public rights-of-way, by pedestrians or adjacent residential properties.

2) Screening shall be provided at a minimum one (1) foot greater in height than the area/equipment being screened.

3) Structural screening shall be consistent with the architectural elements, materials, and colors of the principal structure. Whenever practicable, these areas and equipment shall be integrated into the main structure.

3. Lighting.

a. The site will intend to meet the needs of Florida's Dark Sky lighting specifications where possible.

b. All streetlights are to be owned and maintained by the Developer, Homeowners Association and/or their successors and assigns.

c. If streetlights are dedicated to OUC, all streetlights are to be owned and maintained by OUC and leased by the Developer, Homeowners Association and/or their successors and assigns at its sole expense, including all associated power costs.

4. Parking

a. Parking shall be provided at the ratio of four spaces per dwelling unit (two spaces in the garage or carport and two spaces in the driveway) plus one space

per two dwelling units in designated on-street parking areas for visitor or short-term parking. Parking spaces shall be provided at a dimension of 9 x 18.

VEHICLE PARKING SPACES (4 off-street per unit): 544 SPACES

VEHICLE PARKING SPACES (0.5 on-street per unit): 68 SPACES

b. All parking shall be accommodated on the development site in approved parking areas. At no time shall parking be allowed in prohibited areas, including but not limited to, parking on roadways, blocking roadways, driveways, and other access ways consistent with section 3 of this agreement. At no time parking shall restrict Emergency vehicles from circulating and accessing buildings

c. The final locations of all access points shall be coordinated with the City of St. Cloud and/or Osceola County.

d. All internal streets, trails, and sidewalks shall be private and shall be maintained by Developer, Homeowners Association and/or their successors and assigns.

e. All pedestrian access to the development provided shall be ADA compliant and connect to adjacent sidewalks and trails.

f. The proposed street layout is conceptual. Final locations of all rights-of-way and streets will be determined during the Subdivision Construction Plans approval process.

g. All on-street parking within the rights-of-way and parking within common areas as required by the City of St. Cloud LDC shall be maintained by the Developer, Homeowners Association and/or their successors and assigns.

h. The City of St. Cloud shall have the right but not obligation, to access, maintain, repair, replace, or otherwise care for or cause to be cared for, stormwater tracts and the drainage easements, including without limitation the drainage systems constructed thereon. A blanket ingress/egress easement is granted in favor of the City of St. Cloud for said purpose.

5. Landscaping

a. Landscaping plans in accordance with this Ordinance the City of St. Cloud Land Development Code will be submitted for review with the Subdivision Construction Plan.

i. The Project shall include a minimum twenty-five foot (25') wide enhanced landscaped tract along the western property line and will be planted with mature materials with a combined height of 16-18 feet at planting. The twenty-five foot (25') wide landscape tract shall include a landscape requirement of canopy trees,

medium/small trees, and shrubs, with a minimum (6') high PVC opaque fence for additional screening.

ii. There shall be a minimum thirty-five foot (35') wide linear park along the east side of the project adjacent to Puffin Road with a meandering sidewalk. The linear park will include landscaping composed of five (5) canopy trees, four (4) medium/small trees, and thirty (30) shrubs every one hundred (100) linear feet.

iii. The Project shall include a minimum twenty-five foot (25') wide enhanced landscape tract along north and south property lines. The twenty-five foot (25') wide landscape and open space tract shall include a landscape requirement of five (5) canopy trees, four (4) medium/small trees, and thirty (30) shrubs for every one hundred (100) linear feet.

iv. Landscape tracts, community foundation plantings, and materials shall be provided as shown in the Landscape Plan as part of the Final Master Plan. Planting design shall utilize the principles of Florida friendly landscaping.

v. The Project landscape tracts, and linear parks shall be maintained by the Developer, Homeowners Association and/or their successors and assigns. These landscape tracts and linear parks shall be considered open space for the purposes of calculation of open space under the City's Land Development Code requirements.

vi. All landscaping and open space elements, including trees within the right of ways and common areas in this development as required by the City of St. Cloud Land Development Code shall be maintained by the Developer, Homeowners Association and/or their successors and assigns.

vii. Development shall contain a minimum of 85 inches per acre of trees (measured in D.B.H. for preserved trees and in caliper for replacement trees).

b. Where applicable the site will include herbaceous planting and landscaping to assist with water filtration and water quality.

c. A tree removal permit shall be required to remove, relocate, alter or replace any tree with a trunk diameter of four (4) inches at four and a half (4.5) feet above ground level measured at breast height.

d. All landscaping elements, including trees within the rights-of-way and common areas in this development as required by the City of St. Cloud LDC shall be maintained by the Developer, Homeowners Association and/or their successors and assigns. A landscape and irrigation plan meeting the City's LDC will be

submitted with the Subdivision Construction Plans. Planting design shall utilize the principles of Florida friendly landscaping.

6. Open Space

    a. Open space shall be properly designed, located and function as an amenity to the residents and users of the development. Open space elements shall be available to all residents and users of the development. Areas such as private lot setback yards, rights-of-way, and isolated areas not available to the residents and users of the development are not considered open space to meet the requirements stated above. Only parking lots required for civic or recreational uses may be counted towards the open space requirements. Open space and recreation areas shall be available to all residents of the Harvest Grove PUD.

    b. Amenitized stormwater ponds and multi-purpose trails can be applied to applicable open space requirements. Amenitized stormwater ponds, if designed appropriately with pedestrian access, may count towards 50% of the City of St. Cloud's open space requirements. Stormwater ponds within this development must be amenitized.

7. Signs

    a. Billboards and pole signs shall be prohibited.

    b. All signage must be in accordance with the City of St. Cloud LDC as outlined for Residential Subdivisions.

8. Development will be constructed in one phase.

9. All sanitary sewer collection, potable water and reclaimed water distribution systems may be dedicated to the Toho Water Authority.

10. The City of St. Cloud shall have the right but not obligation, to access, maintain, repair, replace or otherwise care for or cause to be cared for, stormwater tracts and the drainage easements, including without limitation the drainage systems constructed thereon. A blanket ingress/egress easement is granted in favor of the City of St. Cloud for said purpose.

B. PUD Zoning Regulations

1. The Preliminary Subdivision Plan shall be reviewed as both the Preliminary Subdivision Plan and the Final Master Plan.

2. If substantial development, as determined by the City Council has not begun within three years after approval of the PUD PMP/FMP, the approval of the PUD PMP/FMP will be reviewed by the Planning Commission to determine appropriateness of the PUD zoning designation for the subject property. The city council shall consider the recommendations of the development review committee and the planning commission and shall move to rezone the property to a more appropriate zoning classification or shall extend the deadline to undertaking construction. These procedures shall also be followed when such extended deadlines are not met.

Any zoning regulations not specifically addressed in this Ordinance shall comply with the applicable section of the City of St. Cloud Land Development Code.

SECTION 4:

The City Manager or his/her designee is authorized and directed to promptly enter such change on the Official Zoning Map.

SECTION 5:

Upon adoption of this ordinance, the Planning Commission recommendation and "Proof of Publication" of the required Public Hearing notices shall be filed in the in the City Manager's Office.

SECTION 6:

If any section or portion of a section of this ordinance proves to be invalid, unlawful, or unconstitutional, it shall not be held to impair the validity, force, or effect of any other section or part of this ordinance.

SECTION 7:

Effective Date. This ordinance has been published and shall take effect as provided by law.

First Reading on the 11th day of September, 2025.

Second Reading and Final Passage on the 13th day of November, 2025.

CITY OF ST. CLOUD

_____

Christian B. Robertson, Mayor

ATTEST:

_____

Ivy Llauro, City Clerk

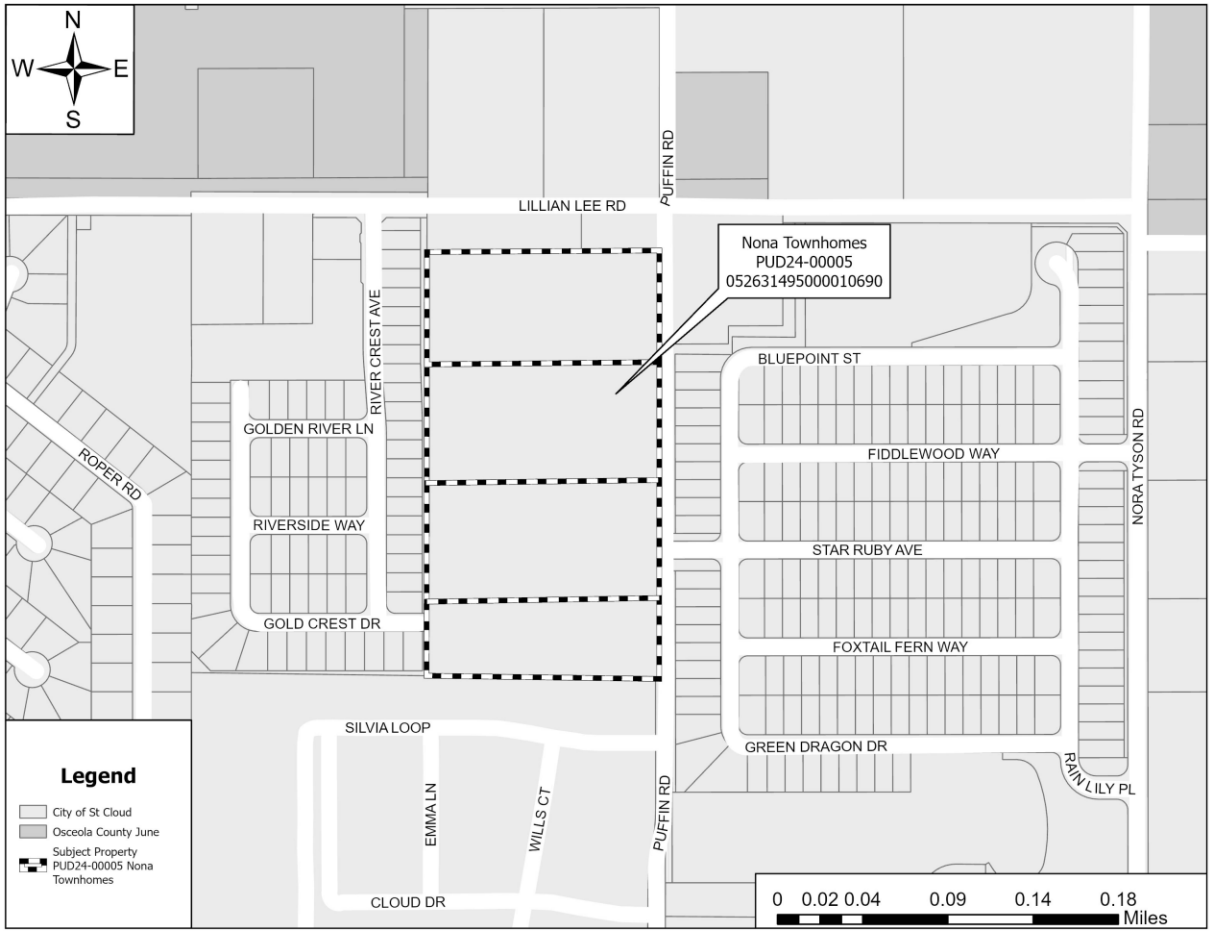
LEGAL IN FORM AND VALID IF ADOPTED:
DeBeaubien, Simmons, Knight, Mantzaris & Neal, LLP

_____

Daniel F. Mantzaris, City Attorney

Pursuant to Section 695.26 (3) (f), this instrument exempt from Chapter 695, F.S.: Prepared by and return to a Public Official: City Manager, City of St. Cloud; 1300 9th Street; St. Cloud, Florida 34769

EXHIBIT “A”



PARCEL(S) No.(s)
05-26-31-4950-0001-0690,
05-26-31-4950-0001-0760,
05-26-31-4950-0001-0850,
05-26-31-4950-0001-0920

PRELIMINARY MASTER PLAN

FOR

HARVEST GROVE

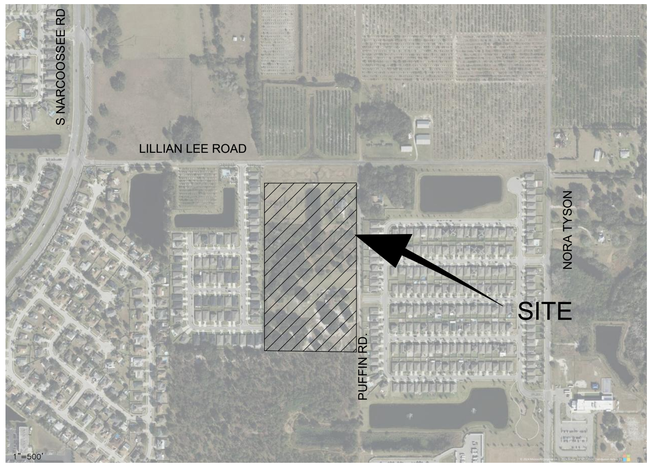
PID:
05-26-31-4950-0001-0690, 05-26-31-4950-0001-0760,
05-26-31-4950-0001-0850, 05-26-31-4950-0001-0920

NO.	DESCRIPTION
01	Cover
02	Survey
03	Vicinity Map (Zoning)
04	Vicinity Map (Future Land Use)
05	Preliminary Master Site Plan
06	Preliminary Utility Plan
07	Soils Map
08	Building Elevations (1)
09	Building Elevations (2)

OWNER:

LENNAR HOMES
LOGAN LANTRIP
6675 WESTWOOD BLVD 5TH FLOOR
ORLANDO, FL 32821

LOCATION MAP



LEGAL DESCRIPTION:

PARCEL 1:
LOTS 76, 85 AND 92, THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION OF SECTION 5, TOWNSHIP 26 SOUTH, RANGE 31 EAST, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK B, PAGE 22, PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA.

TOGETHER WITH A 1982 SKYLINE MOBILE HOME WITH ID. NO. 54630245EA AND ID. NO. 54630245EB.

PARCEL 2:
LOT 69, LESS AND EXCEPT THE NORTH 17.5 FEET THEREOF, THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION OF SECTION 5, TOWNSHIP 26 SOUTH, RANGE 31 EAST, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK B, PAGE 22, PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA.

DENSITY STATEMENT:		
TOTAL AREA:	17.35	AC
(LESS) PRESERVED WETLANDS:	0.00	AC
(LESS) DEDICATED ROW:	0.29	AC
NET DEVELOPABLE ACRES:	17.06	AC
PROPOSED FRONT LOAD TOWNHOMES:	60	DU
PROPOSED REAR LOAD TOWNHOMES:	76	DU
TOTAL RESIDENTIAL DWELLING UNITS:	136	DU
PROPOSED DENSITY (UNIT COUNT/ NET DEVELOPABLE ACRES):	7.97	DU/AC

DEVELOPMENT TABLE		
TYPE	FRONT LOAD	REAR LOAD
NUMBER OF LOTS	60	76
TYPICAL LOT AREA (SF)	2,250	2,400
TYPICAL LOT AREA (AC)	0.052	0.055
TOTAL AREA OF ALL LOTS (AC)	3.120	4.180
TOTAL AREA OF ALL LOTS (SF)	153,722	204,996

ADJACENT PROPERTIES	FUTURE LAND USE	MIN. BUFFER REQUIRED	PROVIDED LANDSCAPE TRACT
NORTH	LDR	0'	25'
EAST	LDR	0'	35'
SOUTH	HB	0'	25'
WEST	MDR	0'	25'

1. Residential Development Standards

SINGLE-FAMILY REAR LOAD ATTACHED DWELLINGS	
MINIMUM LOT WIDTH	Perimeter: 27.5 feet. Interior: 20 feet Corner: 30 feet
MINIMUM LIVING AREA	1,800 square feet
MAXIMUM LOT COVERAGE	75%
MAXIMUM BUILDING HEIGHT	30 feet
SINGLE-FAMILY FRONT LOAD ATTACHED DWELLINGS	
MINIMUM LOT WIDTH	Perimeter: 32.5 feet. Interior: 25 feet Corner: 35 feet
MINIMUM LIVING AREA	1,600 square feet
MAXIMUM LOT COVERAGE	75%
MAXIMUM BUILDING HEIGHT	30 feet

MINIMUM BUILDING SETBACKS	
FRONT LOAD TOWNHOME FRONT (GARAGE)	25 feet
FRONT LOAD TOWNHOME FRONT (BUILDING)	10 feet
FRONT LOAD TOWNHOME REAR	10 feet
REAR LOAD TOWNHOME FRONT	10 feet
REAR LOAD ALLEY	20 feet
INTERNAL SIDE	0-foot (i)
PERIMITER UNIT SIDE	7.5 feet
STREET SIDE	10 feet
MINIMUM SEPARATION BETWEEN BUILDINGS	15 feet
ACCESSORY STRUCTURE	5 feet

PUD PERIMETER REQUIREMENT	
ENHANCED LANDSCAPE LINEAR PARK	35-feet minimum along east property line adjacent to Puffin Road
ENHANCED LANDSCAPE TRACT	25-feet minimum along west, north, and south property lines

NOTES:
i. 0-foot setbacks pertain to internal dwelling units for single-family attached products.
ii. All setbacks must be measured from the property line.
iii. Perimeter buffers are not required per the Land Development Code for the proposed land use of single family to any adjacent use. Enhanced perimeter landscaped areas will be developed in accordance with Section B.5 of this ordinance.

1. WATER, SANITARY SEWER & RECLAIM
TOHO WATER AUTHORITY
951 M.L.K. JR BLVD.
KISSIMMEE, FL 34741
(407) 944-5000

2. ELECTRIC
ORLANDO UTILITIES COMMISSION
2903 17TH ST
ST. CLOUD, FL 34769
(407) 957-7231

3. CABLE TELEVISION
BRIGHT HOUSE NETWORKS
3767 ALL AMERICAN BLVD
ORLANDO, FL 32810
(407) 532-8509

4. TELEPHONE
COMCAST COMMUNICATIONS
8130 CR. 44, LEG A
LEESBURG, FL 34768
(352) 315-8528

5. CENTURYLINK
33 N. MAIN ST
WINTER GARDEN, FL 34787
(407) 814-5344

6. OSCEOLA COUNTY PUBLIC WORKS
1 COURTHOUSE SQUARE, SUITE 3100
KISSIMMEE, FL 34741
(407) 742-0662

7. CITY OF ST. CLOUD PUBLIC WORKS
1300 9TH ST
ST CLOUD, FL 34769
(407) 957-7347

NOTE:
THE FOLLOWING PROPOSED FACILITIES SHOWN ON THE DEVELOPMENT PLANS ARE FOR REFERENCE PURPOSES ONLY AND EACH SHALL REQUIRE A SEPARATE BUILDING PERMIT. THE LIST INCLUDES, BUT NOT LIMITED TO: PROPOSED BUILDINGS, SANITARY LIFT STATIONS, LIGHT FIXTURES (POLES) THAT ARE INDEPENDENT FROM ANY BUILDING STRUCTURE, FENCES, GATES, MONUMENT SIGNS, DUMPSTER ENCLOSURES, AND RETAINING WALL.

REVISION TABLE		
1	5/15/25	PUD COMMENTS
NO.	DATE	DESCRIPTION

Digitally signed by Cameron K Hindle
Date: 2025.08.07 09:14:07 -04'00'

PREPARED BY:
8 BROADWAY, SUITE 104, KISSIMMEE, FLORIDA 34741-5708
PHONE: (407) 847-9433 FAX: (321) 442-1045
ENG. CERT. OF AUTHOR. No. 3265/SUR. CERT. OF AUTHOR. No. 3270
ENGINEERING, SURVEYING AND PLANNING
Hanson, Walter & Associates, Inc.

Know what's below. Call before you dig.

SITE INFORMATION:

1. OWNER:
LENNAR HOMES
LOGAN LANTRIP
LOGAN.LANTRIP@LENNAR.COM
(352) 217-8908
6675 WESTWOOD BLVD 5TH FLOOR
ORLANDO, FL 32821

2. OBJECTIVES:
THE INTENT OF THIS SITE IS TO CONSTRUCT A 136 LOT TOWNHOME NEIGHBORHOOD

1 3. EXISTING ZONING/LAND USE:
THE EXISTING ZONING FOR THIS SITE IS: R-1B
THE EXISTING FUTURE LAND USE FOR THIS SITE IS: MEDIUM DENSITY RESIDENTIAL (MDR)

4. PROPOSED ZONING/LAND USE
THE PROPOSED ZONING FOR THIS SITE IS: PUD

5. SETBACK:

FRONT LOAD TOWNHOME FRONT	25'
FRONT LOAD TOWNHOME REAR	10'
STREET SIDE	10'
BETWEEN BUILDINGS	15'
REAR LOAD TONWHOME FRONT	10'
REAR LOAD ALLEY	20'

1 6. PROPOSED SITE CALCULATIONS:

SITE AREA=	743,310 SQ FT	17.06 ACRES	98.33%
DEDICATED ROW=	12,604 SQ FT	0.29 ACRES	1.67%
TOTAL SITE AREA=	755,914 SQ FT	17.35 ACRES	100%
IMPERVIOUS (PAVEMENT/CONCRETE)=	129,578 SQ FT	2.97 ACRES	17.43%
IMPERVIOUS (POND)=	58,053 SQ FT	1.33 ACRES	7.81%
BUILDING=	219,300 SQ FT	5.03 ACRES	29.50%
PERVIOUS=	336,379 SQ FT	7.72 ACRES	45.25%
TOTAL IMPERVIOUS AREA=	406,931 SQ FT	9.34 ACRES	54.75%
TOTAL PERVIOUS AREA=	336,379 SQ FT	7.72 ACRES	45.25%

7. TRIP GENERATION:
BASED ON THE 11TH EDITION OF THE INSTITUTE OF TRANSPORTATION ENGINEERS, TRIP GENERATION MANUAL; SINGLE-FAMILY ATTACHED/(TOWNHOMES) (SITE CODE: 215)

WEEKDAY 136 (LOTS) = 988 TRIPS (50% ENTER / 50% EXIT)
WEEKDAY (A.M. PEAK HOUR) = 136 (LOTS) = 66 TRIPS (17% ENTER / 83% EXIT)
WEEKDAY (P.M. PEAK HOUR) = 136 (LOTS) = 78 TRIPS (67% ENTER / 33% EXIT)

8. FIELD VERIFY ALL UTILITIES PRIOR TO CONSTRUCTION. IF CONFLICTS ARISE NOTIFY ENGINEER PRIOR TO CONSTRUCTION.
9. THERE SHALL BE A 10' DRAINAGE AND UTILITY EASEMENT ALONG ALL FRONT LOT LINES, 5' DRAINAGE AND UTILITY EASEMENT ALONG ALL REAR AND SIDE LOT LINES.
10. STORMWATER SYSTEMS TO BE MAINTAINED BY HOA
11. PUBLIC ROAD TO BE MAINTAINED BY CITY OF ST. CLOUD
12. PRIVATE ROADS TO BE MAINTAINED BY HOA.
13. ALL APPLICABLE STATE AND FEDERAL PERMITS MUST BE OBTAINED BEFORE COMMENCEMENT OF DEVELOPMENT.
14. MAINTENANCE OF TRAFFIC PLAN (MOT) SHALL INCLUDE HOURS OF OPERATION. "VMB'S AND PIO NOTIFICATION ARE ADDITIONALLY REQUIRED SEVERAL DAYS IN ADVANCE OF OPERATIONS. "MUST HAVE MOT CERTIFIED FIELD PERSONNEL. "A BOND OR LETTER OF CREDIT MAY BE REQUIRED. "INSURANCE CERTIFICATE IS REQUIRED FOR WORK IN ROW "NOTIFICATION MUST BE PROVIDED TO ALL RIGHT OF WAY USERS PRIOR TO WORK IN ROW, PROVIDE VERIFICATION TO INSPECTIONS PRIOR TO PRE-CONSTRUCTION CONFERENCE. "A LICENSE IS REQUIRED FOR UNDERGROUND UTILITIES INSTALLATION." SIDEWALKS SHALL BE MAINTAINED OPEN DURING CONSTRUCTION, OR A SAFE, TEMPORARY, APPROVED PEDESTRIAN PATH SHALL BE PROVIDED UNTIL SIDEWALK CAN BE RE-OPENED. "PURSUANT TO THE PROVISIONS OF FLORIDA STATUTE 553.851. "GAS NOTIFICATION #

1 15. CIVIL ENGINEER OF RECORD: CAMERON HINDLE (CHINDLE@HANSONWALTER.COM)
GEOTECHNICAL ENGINEER: LUIS ALMODOVAR (LALMODOVAR@TEAMUES.COM)
SURVEYOR: RICK BROWN (RICK@JSURVEYING.COM)
ENVIRONMENTAL: MARK AUSLEY (MARK@BIO-TECHCONSULTING.COM)
LANDSCAPE ARCHITECT: KARINA VEAUDRY (KVEAUDRY@NFCLANDSCAPE.COM)
TRANSPORTATION ENGINEER: CHARLOTTE DAVIDSON (CHARLOTTED@TRAFFICMOBILITY.COM)
DEVELOPER: DANIEL LAROSA (DANIEL.LAROSA@LENNAR.COM)

16. THE FOLLOWING PROPOSED FACILITIES SHOWN ON THE DEVELOPMENT PLANS ARE FOR REFERENCE PURPOSES ONLY AND EACH SHALL REQUIRE A SEPARATE BUILDING PERMIT. THE LIST INCLUDES, BUT IN NOT LIMITED TO: PROPOSED BUILDINGS, SANITARY LIFT STATIONS, LIGHT FIXTURES (POLES) THAT ARE INDEPENDENT FROM ANY BUILDING STRUCTURE, FENCES , GATES, MONUMENT SIGNS, DUMPSTER ENCLOSURES AND DECORATIVE RETAINING WALLS.
17. THIS SITE WILL BE CONSTRUCTED IN ONE PHASE.
18. ALL PROPOSED UTILITIES WILL BE PROVIDED UNDERGROUND.
19. ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FIRM MAP NO. 12097C0115G, THIS PROPERTY IS LOCATED IN FLOOD ZONE "X".
20. THE SITE SOILS CLASSIFICATION PER THE SOIL SURVEY OF OSCEOLA COUNTY PUBLISHED BY THE NATIONAL COOPERATIVE SOIL SURVEY, DATED APRIL 1979 IS : MYAKKA FINE SAND, ONA FINE SAND, AND TAVARES FINE SAND.
21. RECREATION AND OPEN SPACE CALCULATIONS PROVIDED ON SHEET 05.
22. CUT AND FILL EARTHWORK FOR THE PROJECT SHALL BALANCE ONSITE AND THERE SHALL BE NO EXPORT OF FILL FROM THIS SITE.
23. TOHO WATER AUTHOIRTY WILL MAINTAIN THE WATER, REUSE AND SANITARY SEWER FORCE MAIN WITHIN THE CITY OF ST. CLOUD RIGHT-OF-WAY.
1 24. MAXIMUM BUILDING HEIGHT IS 2 STORIES, AND MAXIMUM HEIGHT OF 30 FEET.
1 25. ANY PROPOSED ROADWAY LANE CLOSURE MUST BE SUBMITTED IN WRITING ACCOMPANIED BY A SPECIFIC MOT PLAN DETAILING THE SIGNAGE/DETOUR PLAN, DURATION OF THE ROAD LANE CLOSURE, NOTIFICATION OF LOCAL EMERGENCY AND LAW ENFORCEMENT OFFICES, NOTIFICATION OF CITY OF ST. CLOUD PUBLIC INFORMATION OFFICE AND ALL AFFECTED LOCAL RESIDENTS MUST BE NOTIFIED OF THE ROAD IN ADVANCE PRIOR TO THE BEGINNING OF ANY CONSTRUCTION ACTIVITY WITHIN THE ROADWAYS. ALL ROADWAY LANE CLOSURE MUST BE DONE IN STAGES WHEREIN ONLY SECTIONS OF COUNTY ROADWAYS TRAVEL LANES WILL BE CLOSED AT A TIME. THIS IS TO KEEP EMERGENCY VEHICLES ROAD ACCESSIBILITY IMPACT TO A MINIMUM.
25. ALL PURPLE PIPES CONSTRUCTED AS PART OF THE RE-USE SYSTEM SHALL NEVER BE USED TO CONVEY DRINKING WATER AT ANY TIME IN THE FUTURE.
26. ALL ALLEYS WILL BE PRIVATE INFRASTRUCTURE WITH A 10FT UTILITY EASEMENTS ON EACH SIDE OF ROW, AND ALL REMAINING ROADS WILL BE PUBLIC INFRASTRUCTURE.
26. A HOMEOWNERS ASSOCIATION WILL BE CREATED AND WILL MAINTAIN THE OPEN SPACE AND RECREATION ON SITE.
27. ELECTRICAL DESIGN WILL BE PROVIDED WITH CONSTRUCTION PLANS.
28. ALL PROPOSED UTILITIES/STORMWATER IMPROVEMENTS ARE PRELIMINARY. THEY WILL BE FINALIZED DURING CONSTRUCTION PLANS.

HWA JOB # 5557-01
SHEET 01 OF 09

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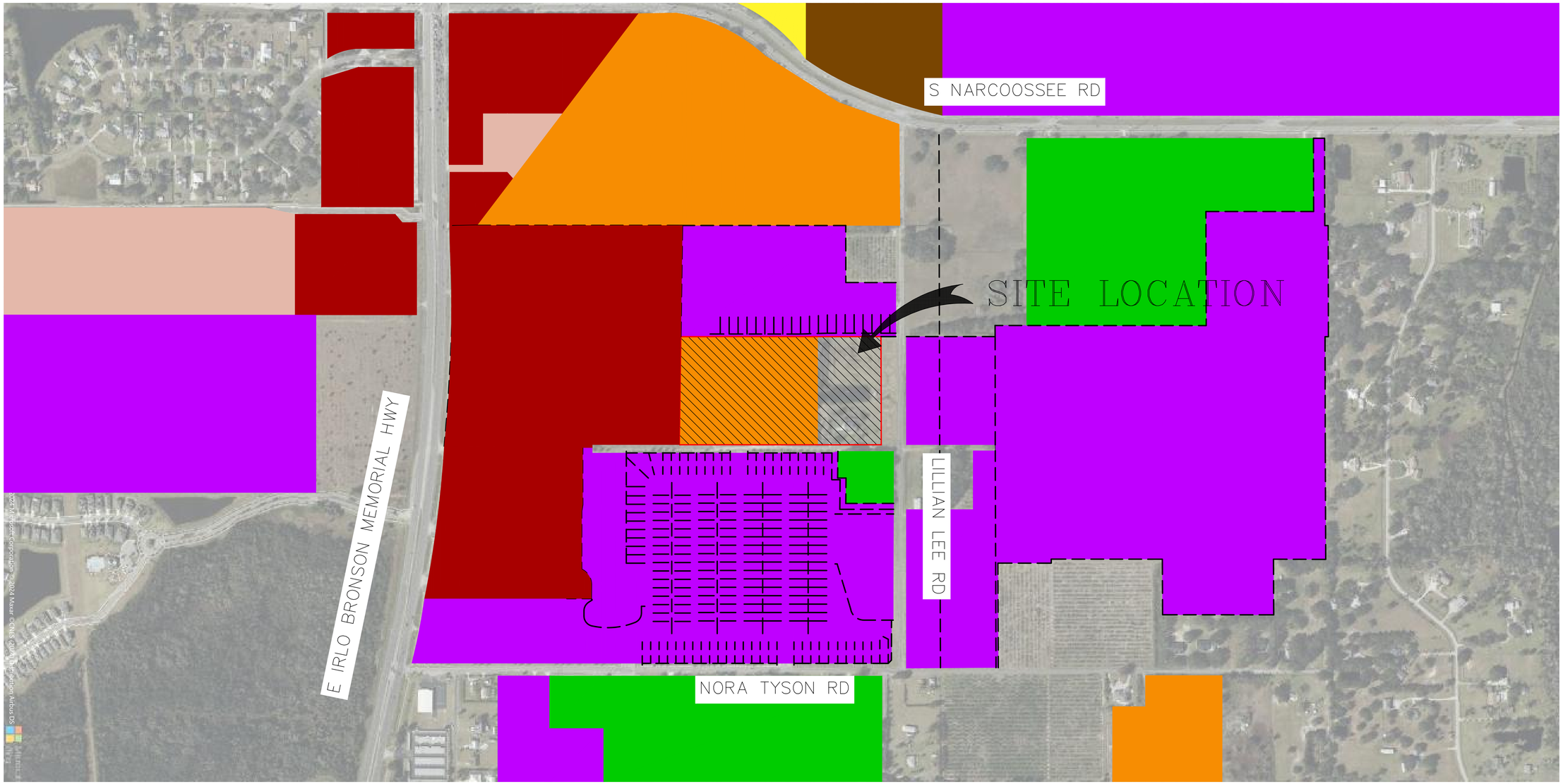
0 300' 600'
GRAPHIC SCALE
IN FEET
1 INCH = 300 FEET



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HARVEST GROVE
PRELIMINARY MASTER PLAN

VICINITY MAP (ZONING)

Digitally signed by Cameron K Hindle
Date: 2025.08.07 09:14:07 -04'00'

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JOB Nº 5557-01

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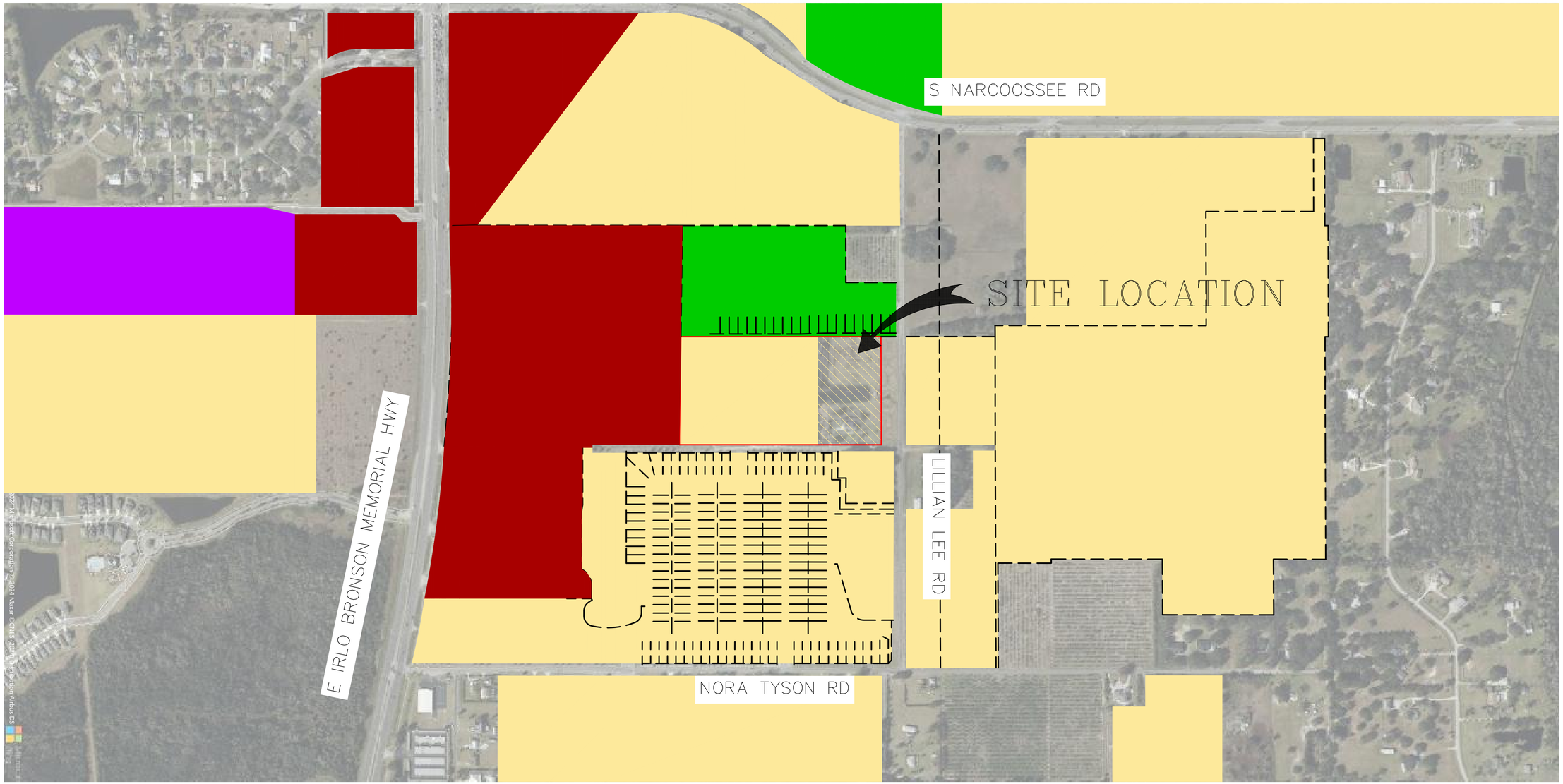

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HARVEST GROVE
PRELIMINARY MASTER PLAN

VICINITY MAP (FUTURE LAND USE)

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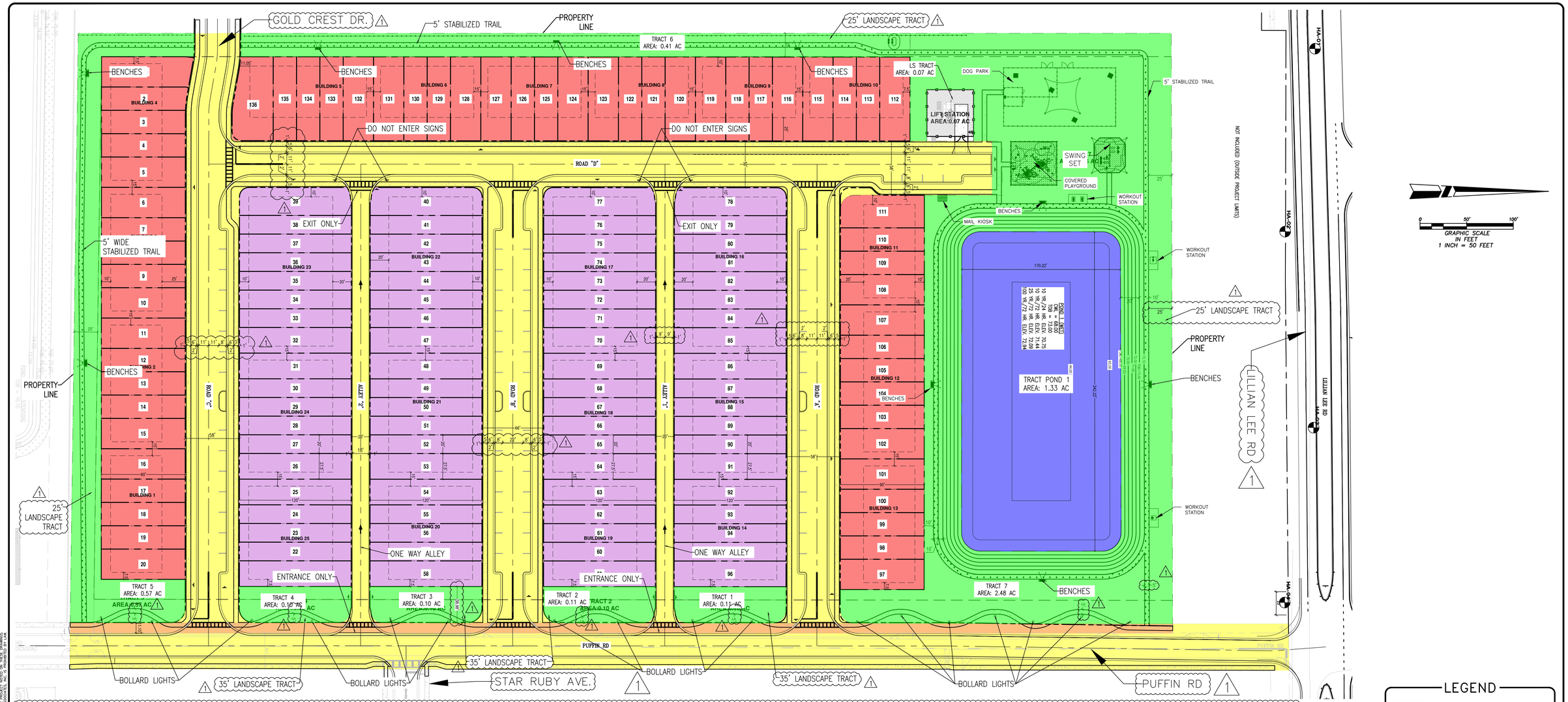


Open Space:				
Total Open Space Required (25% of total area)	4.27	ac	185,828	SF
Proposed Open Space (Open Space Tracts)	3.88	ac	169,066	SF
Open Pond Space Provided (Max 50% of required open space)	1.33	ac	58,053	SF
Total Open Space Provided	5.21	ac	227,123	SF

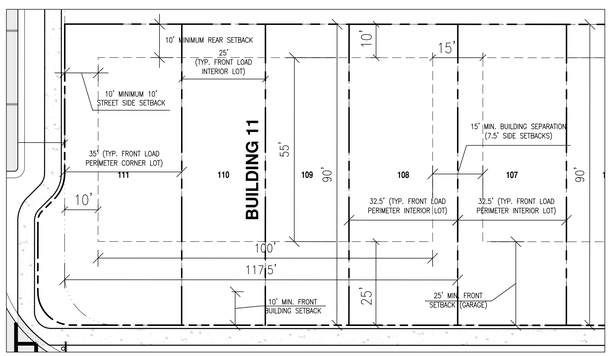
TRACT TABLE	AREA (AC)	AREA (SF)	OWNER	MAINTENANCE/ RESPONSIBILITY	TRACT USE
TRACT 1	0.11	4596	HOA	HOA	OPEN SPACE
TRACT 2	0.11	4586	HOA	HOA	OPEN SPACE
TRACT 3	0.10	4573	HOA	HOA	OPEN SPACE
TRACT 4	0.10	4564	HOA	HOA	OPEN SPACE
TRACT 5	0.57	24932	HOA	HOA	OPEN SPACE
TRACT 6	0.41	17961	HOA	HOA	OPEN SPACE
TRACT 7	2.48	107857	HOA	HOA	OPEN SPACE
LS TRACT	0.07	2916	TOHO	TOHO	LIFT STATION
TRACT POND A	1.33	58053	HOA	HOA	OPEN SPACE / WATER MGMT.

Density Statement:				
Total Area	17.35	ac	755,914	SF
(Less) Preserved Wetlands	0	ac	0	SF
(Less) Dedicated ROW	0.29	ac	12,604	SF
Net Developable Acres	17.06	ac	743,310	SF
Proposed Front Load Townhomes	60	du		
Proposed Rear Load Townhomes	76	du		
Total Residential Dwelling Units	136	du		
Proposed Density (Unit Count/ Net developable area)	**7.97**	**du/ac**		
Recreation:				
Dog Park	0.18	AC	7,940	SF
Covered Playground	0.05	AC	2,315	SF
Swing Set	0.03	AC	1,200	SF
Appropriately Designed Water Management Ponds	1.33	AC	58,053	SF
Trails	0.36	AC	15,713	SF

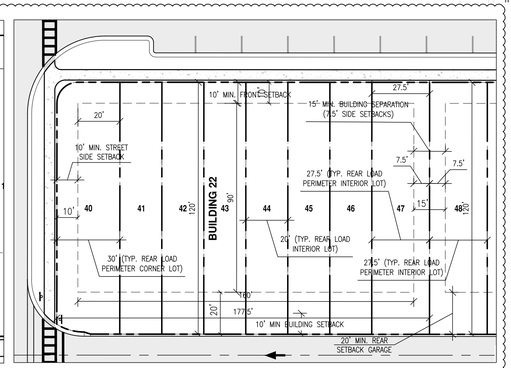
ADJACENT PROPERTIES	LAND USE	MIN. BUFFER REQUIRED	PROVIDED LANDSCAPE TRACT
NORTH	LDR	0'	25'
EAST	LDR	0'	35'
SOUTH	HB	0'	25'
WEST	MR	0'	25'

Parking Standards:		
Required Parking (4 spaces per unit) = (136 units * 4 spaces/unit)	544	spaces
Required Parking (1 spaces per every 2 units) = (136 units * 0.5 spaces/unit)	68	spaces
Total Required Parking	612	spaces
FL Spaces Provided (2 spaces garage & 2 spaces driveway) (60 homes * 4 spaces)	240	spaces
RL Spaces Provided (2 spaces garage & 2 spaces driveway) (76 homes * 4 spaces)	304	spaces
On Street Parking Spaces Provided	68	spaces
Total Parking Provided	612	spaces

NOTES:
1.) HOUSING PRICES CAN CHANGE DEPENDING ON MARKET CONDITIONS, BUT HOME PRICE ESTIMATES RANGE FROM $330,000 TO $370,000.
2.) PROJECT WILL BE CONSTRUCTED IN ONE PHASE WITH THE AMENITIES INCLUDED IN THE FIRST PHASE.



TYPICAL 25'x90' FL TOWNHOMES & MINIMUM CORNER
NOT TO SCALE



TYPICAL 20'x120' FL TOWNHOMES & MINIMUM CORNER
NOT TO SCALE

LEGEND
- 20'X120' RL TOWNHOMES
- 25'X90' FL TOWNHOMES
- ROADWAYS/RIGHT OF WAY
- OPEN SPACE TRACT
- POND TRACT
- RIGHT OF WAY DEDICATION

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HARVEST GROVE
PRELIMINARY MASTER PLAN

PRELIMINARY MASTER SITE PLAN

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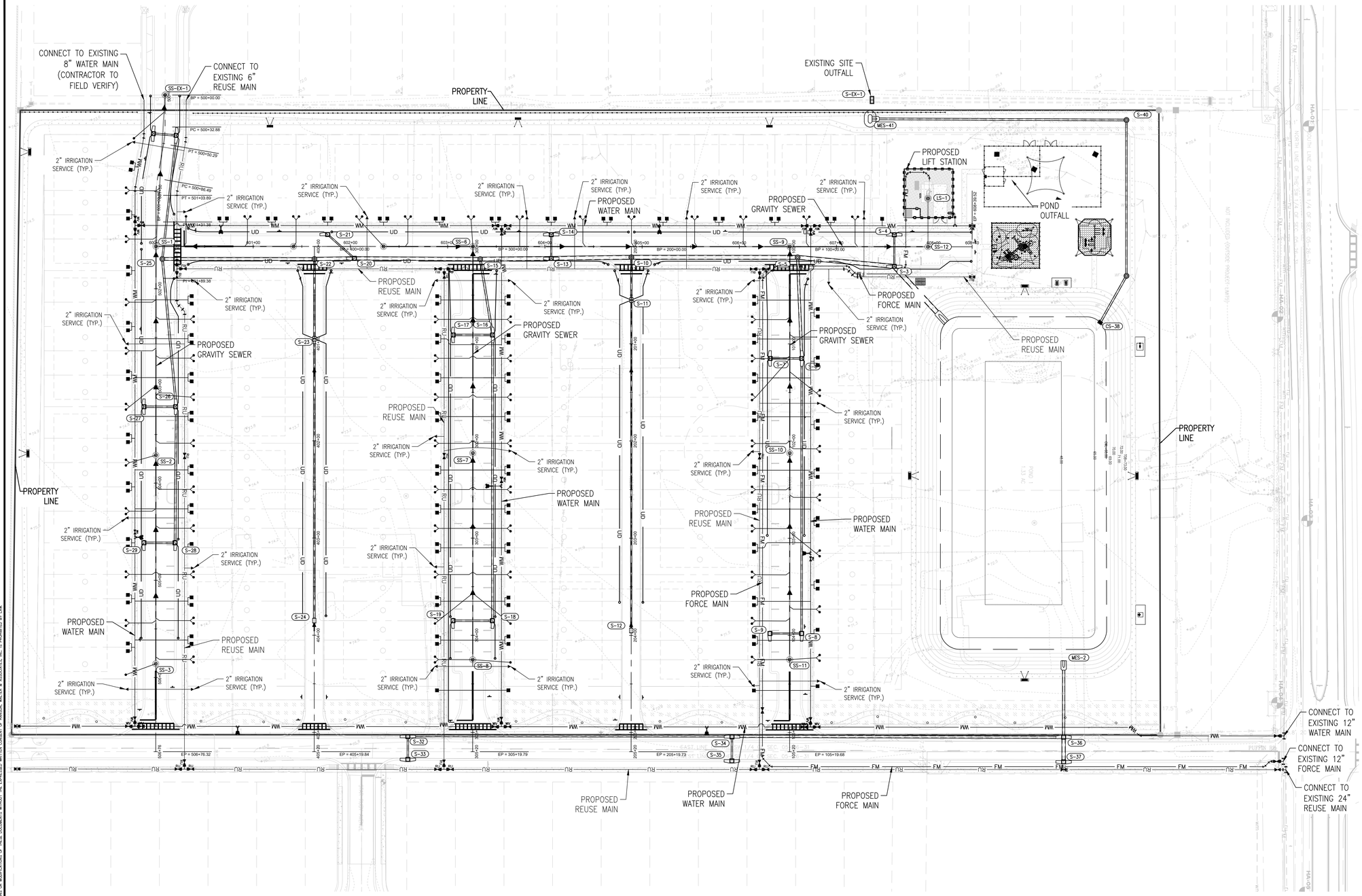

NOTES:

1. FIELD VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. IF CONFLICT ARE ENCOUNTERED CONTACT ENGINEER PRIOR TO CONSTRUCTION.
2. ALL SANITARY LATERALS SHALL BE A MINIMUM OF 6" WITH A MINIMUM SLOPE OF 1.0% SLOPE.
3. ALL THESE ARE OSCEOLA COUNTY RIGHT OF WAYS AND THE MINIMUM COVER OVER TWA UTILITY MAINS SHALL BE NO LESS THAN 36" IN CITY, FDOT RIGHT OF WAYS AND EASEMENTS AND 42.
4. CONTRACTOR SHALL AS-BUILT ALL UTILITY CROSSINGS TO INSURE HORIZONTAL AND VERTICAL SEPARATIONS REQUIREMENTS ARE MET.
5. POLYETHYLENE TUBING SHALL BE SDR-9 RATED AT 200 PSI MINIMUM.
6. MAINTAIN A MINIMUM 5' HORIZONTAL SEPARATION BETWEEN TREE PLANTING AND ALL UTILITIES (MAINS & APPURTENANCES).
7. REPAIR/REPLACE EXISTING SIDEWALKS, IRRIGATION, LANDSCAPE AND HARDSCAPE DAMAGED AS A RESULT OF CONSTRUCTION OF PROPOSED PROJECT. (SPECIFICALLY WITH RESPECT OF INSTALLATION OF FIRE SERVICES & HYDRANTS)
8. IF THERE IS A NEED TO RELOCATE ANY ABOVE GROUND UTILITY FROM THE PROPOSED LOCATION AS SHOWN ON THE SITE DEVELOPMENT PLANS, INCLUDING BUT NOT LIMITED TO TRANSFORMER BOXES, THEN A SITE DEVELOPMENT PLAN REVISION SHALL BE SUBMITTED, REVIEWED, AND APPROVED PRIOR TO ANY INSTALLATION OF SUCH ABOVE GROUND UTILITIES. THIS INCLUDES ALSO, ANY CHANGE TO ABOVE GROUND UTILITY SCREENING. THE PROPOSED PULL BOXES IN THE PUBLIC SIDEWALK SHALL BE LOCATED UNDERGROUND.
9. ALL SANITARY MANHOLES, RIMS, CLEAN OUTS, POTABLE WATER VALVE BOXES SHALL BE ADJUSTED TO MATCH FINISHED GRADE.
10. CONTRACTOR SHALL COORDINATE WITH THE OSCEOLA COUNTY FIRE DEPARTMENT, IF THE STRUCTURE IS TO BE MARKED WITH AN APPROVED FIRE FIGHTER SAFETY WARNING SIGN IN ACCORDANCE WITH FLORIDA ADMINISTRATIVE CODE 69A-3.012.
11. DEPENDING ON PHASING, THE AUTOMATED FLUSHING DEVICES CAN BE RELOCATED INSTEAD OF INSTALLING NEW ONES.
12. ANY DEFLECTIONS THAT ARE OVER 2° IN DEPTH ON PRESSURE MAIN FROM THE CURRENT RUNNING LINE WILL REQUIRE AN ARV.
13. ALL REAR YARDS SHALL BE SODDED WITH DROUGHT TOLERANT BAHIA GRASS
14. SEWER PIPES LESS THAN 15' DEEP WILL REQUIRE SDR 35 PIPE. 15' TO 20' DEEP WILL REQUIRE SDR 26 PIPE.
15. A MINIMUM OF 15' WIDE UTILITY EASEMENT IS REQUIRED CENTERED OVER THE WATER MAIN, FIRE HYDRANTS AND UP TO WATER METERS.
16. A MINIMUM OF 20' WIDE UTILITY EASEMENT IS REQUIRED CENTERED OVER THE SANITARY MAIN AND SERVICE LATERALS UP TO CLEAN-OUTS
17. ALL HYDRANTS ASSEMBLIES ON THE PLAN ARE NOT TO SCALE, ALL HYDRANTS ASSEMBLIES MUST BE 4 FEET FROM EDGE OF PAVEMENT
18. TOHO WATER AUTHORITY WILL MAINTAIN THE SANITARY SEWER FORCE, WATER AND REUSE WATER MAINS WITHIN THE OSCEOLA COUNTY RIGHT-OF-WAY.
19. HAND HOLE LIDS WILL BE REQUIRED FOR CLEANOUTS LOCATED IN AREAS WITH VEHICULAR TRAFFIC.
20. WATER SERVICES 2" AND SMALLER SHALL HAVE DOUBLE STRAP TAPPING SADDLE, CORPORATION STOP, BLUE PE TUBING. NO FITTINGS ALLOWED BETWEEN CORP. STOP AND CURB STOP.
21. REUSE SERVICES 2" AND SMALLER SHALL HAVE DOUBLE STRAP TAPPING SADDLE, CORPORATION STOP, PURPLE PE TUBING. NO FITTINGS ALLOWED BETWEEN CORP. STOP AND CURB STOP.
22. ALL ARV SHALL BE PLACED OUTSIDE OF CLEAR ZONE OF ANY RIGHT OF WAY. IF POSSIBLE, IT SHALL BE PLACED IN AN EASEMENT ADJACENT TO THE RIGHT OF WAY.
23. ALL PROPOSED POLES (SIGN, TRAFFIC, LIGHT) PERMANENT STRUCTURES SHALL MAINTAIN A MINIMUM 10FT HORIZONTAL SEPARATION FROM TWA MAINTAINED UTILITIES.
24. THERE SHOULD BE A MINIMUM 3FT HORIZONTAL SEPARATION BETWEEN THE FORCE-MAIN AND REUSE-MAIN.

LEGEND

11¼	PROPOSED 11 1/4° BEND
22½	PROPOSED 22 1/2° BEND
45	PROPOSED 45° BEND
90	PROPOSED 90° BEND
SSS	PROPOSED SINGLE SANITARY SERVICE
DSS	PROPOSED DOUBLE SANITARY AND REUSE SERVICE
SRS	PROPOSED SINGLE REUSE SERVICE
SWS	PROPOSED SINGLE WATER SERVICE
DWS	PROPOSED DOUBLE WATER SERVICE
	PROPOSED SANITARY SEWER (SS)
WM	PROPOSED WATER MAIN (WM)
FM	PROPOSED FORCE MAIN (FM)
RU	PROPOSED REUSE WATER MAIN (RU)
UD	PROPOSED UNDERDRAIN (UD)
	PROPOSED GATE VALVE (G.V.), TEE
	PROPOSED SANITARY MANHOLE (SMH)
	PROPOSED FIRE HYDRANT ASSEMBLY (F.H.A) 1-TEE AS REQUIRED 1-6" GATE VALVE 6" PVC C-900 AS REQUIRED 1-FIRE HYDRANT
	10' UTILITY EASEMENT
	RIGHT-OF-WAY LINE

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HARVEST GROVE
PRELIMINARY MASTER PLAN

PRELIMINARY UTILITY PLAN

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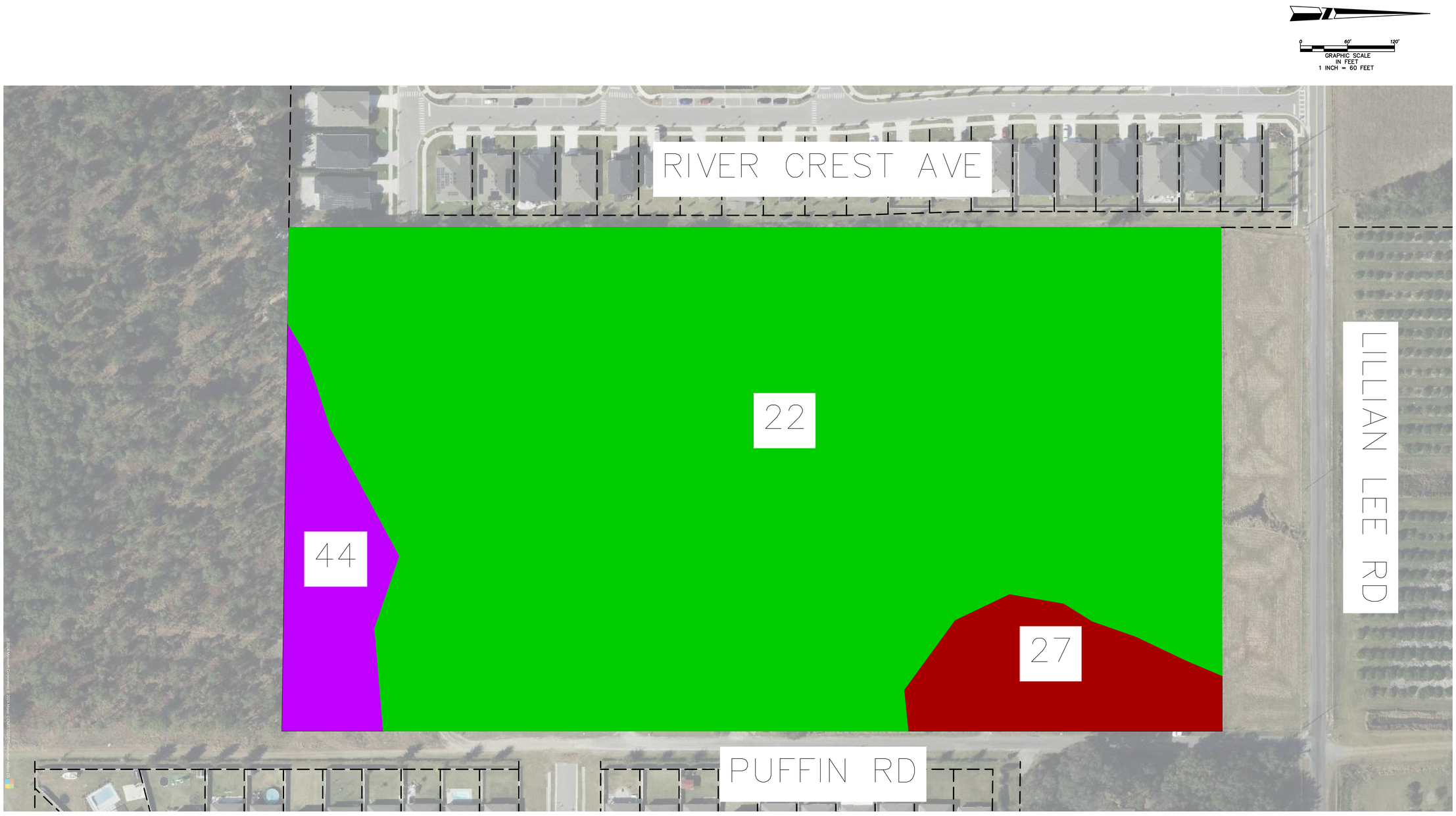

LEGEND

- 22 – MYAKKA FINE SAND
- 44 – ONA FINE SAND
- 27 – TAVARES FINE SAND

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HARVEST GROVE
PRELIMINARY MASTER PLAN

SOILS MAP

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LENNAR

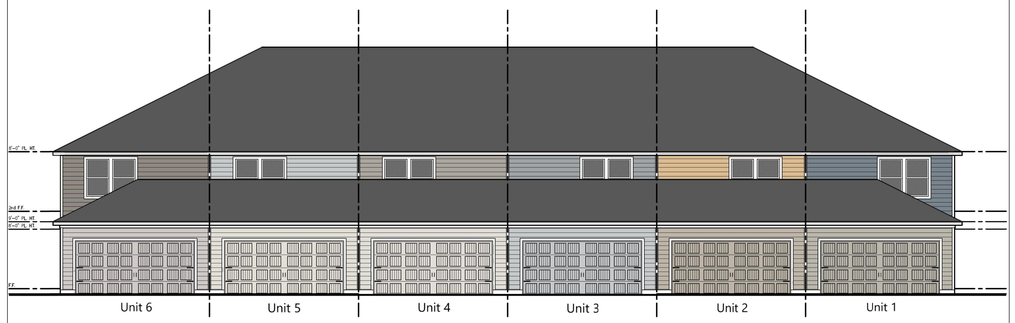
Harvest Grove - 20ft Alley Loaded



6-Plex Building - Front Elevation

LENNAR

Harvest Grove - 20ft Alley Loaded



6-Plex Building - Rear Elevation

LENNAR

Harvest Grove - 20ft Alley Loaded



6-Plex Building - Right and Left Elevation

1

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HARVEST GROVE
PRELIMINARY MASTER PLAN

BUILDING ELEVATIONS (1)

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LENNAR

Harvest Grove - 25ft Front Loaded



6-Plex Building - Front Elevation

LENNAR

Harvest Grove - 25ft Front Loaded



6-Plex Building - Rear Elevation

LENNAR

Harvest Grove - 25ft Front Loaded





6-Plex Building - Side Elevation

1

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Hanson, Walter & Associates, Inc.

HARVEST GROVE
PRELIMINARY MASTER PLAN

BUILDING ELEVATIONS (2)

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THE SCHOOL DISTRICT OF OSCEOLA COUNTY, FLORIDA

PLANNING SERVICES DEPARTMENT

SCHOOL CAPACITY REPORT - THREE YEAR OUTLOOK

UPDATED

Date:	3.21.25	**Current FLU:**	LDR
SDOC #:	2024/25-0048	**Requested FLU:**	MDR
Jurisdiction:	St. Cloud	**Current Zoning:**	R-1B
DRC #:	PUD24-00005 RSBMT	**Requested Zoning:**	PUD
Project Name:	Nona Townhomes	**PID:**	05-26-31-4950-0001-6960 / 0760
Project Location:	Puffin Rd., St. Cloud 34772		05-26-31-4950-0001-0850 / 0920
Comments Due Date:	4.3.25		
AC:	13.2		

If proposed project increases utilization of schools above adopted level of service, applicant will obtain a Letter of Agreement outlining an accommodation plan for the students generated by this project, consistent with the provisions of Sections 6.1. - 6.7. of the Interlocal Agreement for the Planning and Coordination of Public Schools throughout Osceola County (as required by Section 163.31777, F.S.[2012]). "The County/Cities and the applicant must collaborate with the School Board to identify available means that might be used to achieve sufficient capacity to accommodate the development, which may include, but not be limited to developer contributions, project phasing, or developer provided facility improvements." If you should have any questions please feel free to contact the Osceola School District Planning Services Department at 407-518-2964.

Total Proposed Residential Units by Type

SF Single Family	0	**TH** Townhome	136	**MF** Multi-Family	0
Condo Condominium	0	**MH** Mobile Home	0	**STR** Short Term Rental	0
HOP Housing for Older Persons	0	**VV** Vacation Villas	0	**AWH** Affordable-Workforce Housing	0

Estimated Number of New Students Generated by Proposed Development

Elem. (K-5)	14	**Middle (6-8)**	8	**High (9-12)**	13

Student Generation Calculations

Example Calculation: 100 (SF Units) x 0.178 (Elem. Rate) = 18 (Students)

Residential Categories					
Total Units	SF	TH	MF	Condo	MH
136	0	136	0	0	0

Student Generations Rates			
	Elem. (K-5)	Middle (6-8)	High (9-12)
SF	0.139	0.086	0.144
TH	0.096	0.052	0.089
MF	0.157	0.083	0.114
CONDO	0.059	0.03	0.047
MH	0.107	0.065	0.082

Total Students	
Elem (K-5)	14
Middle (6-8)	8
High (9-12)	13

Level of Service (LOS)

	2024/2025			2027/2028		
School Boundaries Impacted	COFTE	Permanent Student Capacity	Current Level of Service	3 YR. Projected COFTE	Projected COFTE w/ Impact	Projected LOS w/ Impact
HTES	1,017	1,174	87%	1,002	1,100	94%
NCMS	1,077	1,528	70%	1,065	1,300	85%
HRHS	2,571	2,716	95%	2,467	3,094	114%

Comments

The District has a history of working closely with the County and two municipalities to alleviate school capacity issues created by expanded residential development. The School District of Osceola County reserves its right to ensure proper mitigation of any impact on school capacity and the collection of Educational System Impact Fees.

THE SCHOOL DISTRICT OF OSCEOLA COUNTY, FLORIDA

PLANNING SERVICES DEPARTMENT

SCHOOL CAPACITY REPORT - THREE YEAR OUTLOOK

Date: 3.21.25
SDOC #: 2024/25-0048
Jurisdiction: St. Cloud
DRC #: PUD24-00005

Comments cont.

Harmony High is overcapacity and utilizes five (5) relocatables to accommodate its existing enrollment. A new high school has been funded and is scheduled to open for the 2026/2027 school year and will provided relief for Harmony High School. Additional capacity may be met through existing space reconfigurations, rezoning, and/or charter schools.

Phase I Environmental Site Assessment

Nona Townhomes
1820, 1850, and 1860 Puffin Road
St. Cloud, Osceola County, Florida

Lennar Homes, LLC
6675 Westwood Boulevard, 5th Floor
Orlando, FL 32821

SCS ENGINEERS

Project No. 09224031.00 | February 28, 2024

1800 Pembrook Drive, Suite 300
Orlando, FL 32810
407-204-3231

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EXECUTIVE SUMMARY

SCS Engineers (SCS) was retained by Lennar Homes, LLC (Client) to prepare a Phase I Environmental Site Assessment (Phase I ESA) for the Nona Townhomes property, located at 1820, 1850, and 1860 Puffin Road in St. Cloud, Osceola County, Florida (the "Subject Property" or "Property"). This assessment was performed in conformance with 40 CFR 312, Standards for Conducting All Appropriate Inquiries, and in general conformance with ASTM E1527-21.

The Subject Property is currently owned by Arma Investments, LP; Walter Malukiewicz; and Christine M. Novy, and encompasses approximately 17.7 acres of land. The Subject Property is comprised of partially wooded land, with one residence, storage shed, and pond to the north; one residence and two shed structures to the east; one central mobile home; and a pole barn structure to the west. The areas surrounding the Subject Property consist of undeveloped land and Lillian Lee Road to the north, with agricultural land (citrus) beyond; Puffin Road to the east, with residences and wooded land beyond; wooded land to the south; and residences to the west.

A review of historical records indicated that the Subject Property existed as partially wooded land with areas of agricultural citrus land and an eastern suspected residence from at least 1944 until additional areas of citrus were developed to the south by 1959. A retention pond was developed on a northern portion of the Subject Property by 1985, and a residence was developed to the north by 1995. An additional residence was developed on an eastern portion of the Subject Property by 1999, and areas of citrus land remained on southern portions of the Subject Property until 2007. The Subject Property remained comprised of pastureland and partially wooded land with northern and eastern residences until the present. Such agricultural activity on the Subject Property would have likely included the use of legal agricultural products such as pesticides, fungicides, herbicides, and/or fertilizers. The legal application (i.e., in accordance with manufacturer's specifications and customary practices) of such substances, in the course of standard operational practices does not constitute a "release to the environment." Therefore, the mere presence of this historical land use does not meet the definition of a Recognized Environmental Condition (REC).

SCS reviewed commercially available regulatory database listings for sites listed on various federal, state, and tribal databases for the Subject Property and vicinity. The Subject Property was not identified in any of the ASTM specified federal, state, or local database listings.

SCS was provided with a previous Phase I ESA report completed by Universal Engineering Sciences (UES) on December 5, 2023, for the Subject Property. No RECs were identified for the Subject Property during UES's Phase I ESA. A copy of the previous Phase I ESA will be available upon request.

Conclusions

In summary, SCS performed a Phase I ESA of the Nona Townhomes property in conformance with the scope and limitations of 40 CFR 312 and ASTM E1527-21 and Client, if any. Any exceptions or deviations are described in Section 8 of this report.

In the opinion of the Environmental Professionals, this assessment has revealed no RECs, controlled RECs, historical RECs, or significant data gaps in connection with the Subject Property.

1 INTRODUCTION

SCS Engineers (SCS) was retained by Lennar Homes, LLC (Client) to prepare a Phase I Environmental Site Assessment (Phase I ESA) of the Nona Townhomes property, located at 1820, 1850, and 1860 Puffin Road in St. Cloud, Osceola County, Florida. A location map for the Subject Property is presented as **Figure 1** in **Appendix A**. This assessment was performed in conformance with 40 CFR 312, Standards for Conducting All Appropriate Inquiries (AAI), and in general conformance with ASTM International (ASTM) E1527-21.

PURPOSE

This Phase I ESA is intended to constitute appropriate inquiry into the previous ownership and uses of the Property, as required to support the assertion of the innocent landowner, contiguous property owner, and/or bona fide prospective purchaser defenses to liability (collectively, the landowner liability protections, or LLPs) under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, a.k.a. Superfund), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and the Small Business Liability Relief and Brownfields Revitalization Act of 2002.

The purpose of this investigation was to identify conditions indicative of the presence of hazardous substances as defined in CERCLA Section 101, and petroleum products, in, on, or at the Property due to a release, likely release, or material threat of a future release to the environment.

If known or suspected contamination is identified, a User seeking to maintain LLPs has responsibilities in addition to completion of an AAI-compliant Phase I ESA. These "continuing obligations" include taking "appropriate care" and "reasonable steps" with respect to known or suspected releases of hazardous substances or petroleum products during the term of property ownership. In addition to these requirements under federal law, there are different requirements under state law with respect to liability protections. If warranted, SCS can provide support for clients with continuing obligations, as appropriate.

SCOPE OF SERVICES

This Phase I ESA is based on:

- Interviews with past and/or present owners, operators, and/or occupants of the Property.
- Reviews of federal, tribal, state, and local government records.
- Visual inspection of the Property and adjoining sites performed on February 14, 2024.
- Review of historical Property use information (topographic maps, aerial photographs, fire insurance maps, previous environmental reports, etc.).
- Commonly known or reasonably ascertainable information about the Property (e.g., interviews with appropriate regulatory agency personnel, review of readily available agency files and documents, interviews with other knowledgeable persons, etc.).
- Degree of obviousness of the presence or likely presence of releases or threatened releases of hazardous substances or petroleum products at the Property and the ability to detect releases or threatened releases by appropriate investigation.
- Information provided as a result of the additional inquiries conducted by the User.

- Review of environmental liens, if provided or authorized to obtain by the User.

SPECIAL TERMS AND CONDITIONS

This Phase I ESA of the Nona Townhomes property has been prepared specifically for Lennar Homes, LLC. The report has been prepared in accordance with the care and skill generally exercised by reputable professionals, under similar circumstances, in this or similar localities. No other warranty, express or implied, is made as to the professional opinions presented herein.

No other party, known or unknown to SCS, is intended as a beneficiary of this report. Third parties use this report at their own risk. SCS assumes no liability of any kind with respect to such use. Third party reliance letters may be issued on request to SCS subject to approval of Lennar Homes, LLC and payment to SCS of a fee for such letters.

LIMITATIONS AND ASSUMPTIONS

The assessment focuses on releases and threatened releases of hazardous substances or petroleum products that could be considered a REC and/or a liability due to their possible presence in significant concentrations (e.g., above acceptable limits set by applicable regulatory authorities) or due to the potential for contaminant migration through exposure pathways (e.g., soil vapor migration or groundwater ingestion). Materials that may contain substances not currently deemed hazardous by the U.S. Environmental Protection Agency (U.S. EPA) or the Florida Department of Environmental Protection (FDEP) were not considered as part of this study.

Unless specifically included in our scope of services, formal surveys for asbestos-containing materials (ACMs), lead-based paint (LBP), water supply plumbing, mold, indoor air quality, and similar matters are not part of this assessment. SCS did not evaluate the Property for compliance with land use, zoning, wetlands, or similar laws. This report is not intended to be an environmental compliance audit. Hazardous substances naturally occurring in plants, soils, and rocks (e.g., heavy metals, naturally occurring asbestos, radon, etc.) are not typically considered in a Phase I ESA. Similarly, construction debris (e.g., discarded concrete, asphalt, etc.) is not considered a concern unless observations suggest that hazardous substances are likely to be present in significant concentrations. Unless otherwise noted, sampling and laboratory analyses of soil, water, air, building materials, or other media, were not performed as part of this investigation. Positive identification of hazardous substances can only be accomplished through sampling and appropriate laboratory analysis.

SCS assumes no responsibility for the accuracy of information obtained from, compiled by, or provided by third-party sources, including regulatory agency listings. SCS assumes that information collected during this Phase I ESA is accurate and correct, unless SCS determines that reliable information exists to the contrary or the information is obviously inaccurate. Additional information subsequently provided, discovered, or produced may alter findings or conclusions made in this Phase I ESA report. Unless warranted, information collected has not been independently validated as part of this assessment. SCS is not responsible for consequences or conditions arising from facts that were not fully disclosed to SCS during the assessment.

PHASE I ESA VIABILITY

This Phase I ESA is based on conditions at the time the individual elements of the report were completed. A Phase I ESA that meets or exceeds the requirements of ASTM E1527-21 and 40 CFR 312 is presumed to be viable when it is conducted within 180 days of the date of the intended transaction (acquisition, lease, refinance, etc.). The completion dates for the Phase I ESA components with a 180-day shelf life are identified below.

Component of Phase I ESA with Shelf-Life Requirement	Completion Date
Interviews	-
Review of Governmental and Historical Records	February 8, 2024
Visual Inspection	February 14, 2024
Declaration of Environmental Professional	February 28, 2024
Environmental Lien Search	Not provided by User

2 GENERAL SITE CHARACTERISTICS

SUBJECT PROPERTY DETAILS

The Subject Property is located at 1820, 1850, and 1860 Puffin Road in St. Cloud, Osceola County, Florida. The Subject Property is further described in the following table:

Subject Property Information	
Address:	The Subject Property is located at 1820, 1850, and 1860 Puffin Road in St. Cloud, Osceola County, Florida.
Historical Address:	No historical addresses identified.
Property Use:	The Subject Property is comprised of partially wooded land, with one residence and a pond to the north; one residence and two shed structures to the east; one central mobile home; and a pole barn structure to the west.
Property Size:	±17.7 acres
Property Parcels (Osceola County Appraiser):	The Subject Property is comprised of four Osceola County Parcels: 05-26-31-4950-0001-0690; 05-26-31-4950-0001-0760; 05-26-31-4950-0001-0850; and 05-26-31-4950-0001-0920.
Property Owners:	Arma Investments, LP; Walter Malukiewicz; and Christine M. Novy
Property Zoning:	Single family - improved; mobile home - improved; and vacant (rural acreage)
Number of Buildings:	Seven
Description of Buildings:	One 2,479-square foot residence, built in 2006, and one shed structure are located on a northern portion of the Subject Property; one 1,636-square foot residence, built in 1996, and two shed structures, built in 1997, are located on an eastern portion of the Subject Property; one

Subject Property Information	
	1,718-square foot mobile home, built in 1992, is located on a central portion of the Subject Property; and one pole barn, built in 1996, is located on a western portion of the Subject Property.
Tenants:	The northern and eastern residences are currently occupied.

ADJOINING SITE USE

Adjoining Property Information	
North:	Undeveloped land and Lillian Lee Road, with agricultural land (citrus) beyond
East:	Puffin Road, with residences and wooded land beyond
South:	Wooded land
West:	Residences

PHYSICAL SETTING

Physical Setting Information	
Source	United States Geological Survey (USGS) 7.5 Minute Topographic Map, Narcoossee, Florida, 2021.
Reported Elevation	Approximately 74 feet above mean sea level.
Reported Slope Direction	Surficial topography slopes generally to the north.
Soil Types	The soils at the Subject Property are classified as Myakka, a poorly drained, fine sand.
Physiographic Setting	The Subject Property is located within the Kissimmee Valley Subdistrict of the Eastern Flatwoods Physiographic Division of Florida.
Geologic Characteristics	The Environmental Data Resources, Inc. (EDR) GeoCheck Physical Setting Report identified geologic units in the vicinity of the Subject Property as stratified sequence Cenozoic sediments.
Hydrogeologic Characteristics	The assumed groundwater flow direction in the vicinity of the Subject Property is to the north; however, local groundwater conditions may vary. Topography, surface water bodies, and other influences onsite and/or in the nearby vicinity of the Subject Property may alter groundwater flow direction locally. In addition to localized influences, groundwater flow direction can alter or fluctuate as a result of seasonal changes.

3 SUBJECT PROPERTY RECONNAISSANCE

Mr. Ben Gregory of SCS conducted a reconnaissance of the Subject Property and surrounding area on February 14, 2024. Mr. Gregory was unaccompanied during the inspection. An aerial image depicting the parcel boundaries for the Subject Property is included as **Figure 2** and an aerial image depicting the existing site conditions is included as **Figure 3**. Both figures are included in **Appendix A**. Photographs taken during the site reconnaissance are included in **Appendix B**.

Subject Property Reconnaissance			
Item	**Observed**	**Not Observed**	**Comment/Description**
Number of Buildings:	☒	☐	Seven
Description of Buildings:	☒	☐	One residence and storage shed were observed to the north; one residence and two shed structures were noted to the east; one mobile home was observed on a central portion of the Subject Property; and one pole barn structure was observed to the west.
Tenants:	☒	☐	The northern and eastern residences were observed to be occupied.
Potable Water Supply:	☒	☐	Two potable wells were observed in the vicinity of the northern and eastern residences, respectively. Components of one additional former potable well were observed on a central portion of the Subject Property in the vicinity of a mobile home.
Sanitary Wastewater:	☐	☒	
Process Wastewater:	☐	☒	
Stormwater/Natural Drainage	☒	☐	One retention pond was observed on a northern portion of the Subject Property.
Electricity:	☒	☐	Orlando Utilities Commission provides electricity to the Subject Property and vicinity.
Electrical Equipment:	☒	☐	Pole-mounted transformers were noted in the right-of-way to the east of the Subject Property. No stains or damage that would be indicative of releases were observed in the vicinity of the transformers.
Elevators or other hydraulic equipment	☐	☒	
Source of Heating and Cooling:	☒	☐	Propane tanks were observed in the vicinity of the two occupied residences.
Hazardous Materials:	☐	☒	
Petroleum Products:	☐	☒	
Drums and containers (≥5 gallons)	☒	☐	One unlabeled 55-gallon drum was observed adjacent to a shed structure on a northern portion of the Subject Property. No staining or stressed vegetation was observed in the vicinity of the drum that would be indicative of a release. Additionally, one empty, approximately 250-gallon PVC water tank was observed

Subject Property Reconnaissance			
Item	**Observed**	**Not Observed**	**Comment/Description**
			staged adjacent to the eastern residence. No stains or odors were noted in the vicinity of the empty tank that would be indicative of a release.
Storage Tanks:	☒	☐	Propane tanks were observed in the vicinity of the two occupied residences. Additionally, one empty, approximately 250-gallon PVC water tank was observed staged adjacent to the eastern residence. No stains or odors were noted in the vicinity of the empty tank that would be indicative of a release.
Wells (including dry wells, irrigation wells, injection wells, abandoned wells, or other wells):	☒	☐	Two potable wells and associated piping were observed in the vicinity of the northern and eastern residences, respectively. Components of one additional former potable well were observed on a central portion of the Subject Property in the vicinity of a mobile home.
Drains or Sumps:	☐	☒	
Pools of Liquid or Standing Water:	☐	☒	
Pits, Ponds or Lagoons:	☒	☐	One retention pond was observed on a northern portion of the Subject Property.
Stained Soil or Pavement, Stressed Vegetation:	☐	☒	
Air Emissions:	☐	☒	
Odors:	☐	☒	
Pesticide and/or Herbicide Management:	☐	☒	
Solid Waste Dumping, Landfilling, or Suspected Fill Material	☒	☐	Scattered surficial debris, including building materials, furniture, discarded appliances, and household waste, were observed throughout central and western portions of the Subject Property. All debris was observed to be surficial and no stained soil that would be indicative of a release was noted in the vicinity of the debris. No evidence of subsurface burial or landfilling was observed at the Subject Property.

Subject Property Reconnaissance			
Item	**Observed**	**Not Observed**	**Comment/Description**
Other Features and Activities and/or Concerns:	☐	☒	

VISUAL INSPECTION OF ADJOINING SITES

SCS viewed the adjoining sites from the Property and/or publicly accessible areas (e.g., public roadways, etc.). No obvious evidence of a REC or indications of contamination (e.g. remediation equipment, staining, USTs, etc.), were observed on adjoining sites during the site inspection.

Direction	Land Use	Comments
North	Undeveloped land and Lillian Lee Road, with agricultural land (citrus) beyond	No obvious indications of the use, storage, or generation of hazardous materials/wastes or petroleum products were observed.
East	Puffin Road, with residences and wooded land beyond	
South	Wooded land	
West	Residences	

4 INTERVIEWS

Owner/Operator Questionnaires were completed by Subject Property owner representatives, Mr. Anil Jasuja and Ms. Chrissy Malukiewicz on February 2 and 3, 2023, respectively. Copies of the completed Owner/Operator Questionnaires are included as **Appendix C.**

Mr. Jasuja, Managing Partner and owner representative of 1850 and 1860 Puffin Road, stated that the current landowner, Arma Investment, LP, has owned the Subject Property since February 2021. Mr. Jasuja stated that he was unaware of any petroleum or chemical spills at the Subject Property, nor was he aware of any prior development on the Subject Property. Mr. Jasuja was not aware of any environmental conditions of concern at the Subject Property or surrounding area.

Ms. Malukiewicz, Property owner of 1820 Puffin Road, stated that she has owned northern portions of the Subject Property since March 2006. Ms. Malukiewicz was unaware of any Subject Property development aside from residential construction in 2005. Ms. Malukiewicz stated that one potable well is currently in use in the vicinity of the northern residence, and she was unaware of any chemical spills at the Subject Property. Ms. Malukiewicz also indicated that she was unaware of any previous environmental investigations or areas of environmental conditions of concern at the Subject Property.

5 HISTORICAL RESEARCH

Site history was evaluated from the following sources:

- Historical aerial photographs provided by EDR (February 7, 2024); and Google Earth Pro Aerial Imagery (accessed February 12, 2024).
- Historical USGS topographic maps provided by EDR (February 8, 2024).
- A search was made by EDR of Sanborn fire insurance map collection and no maps of the Subject Property were identified (February 8, 2024).
- A city directory search was performed by EDR (February 13, 2024). Residential listings were identified for the Subject Property.

Copies of aerial photographs, topographic maps, city directories, and Sanborn maps are included in Appendix D.

Year	Description	Source
1944 - 1953	The Subject Property is predominantly comprised of wooded to partially wooded land and unpaved trail roads, with agricultural land (citrus) on central portions of the Subject Property. One suspected residence is present to the east. The immediately adjoining properties are comprised of partially wooded land and Lillian Lee Road to the north, with partially wooded land beyond; Puffin Road to the east with agricultural land (citrus) beyond; agricultural land (citrus) to the south; and undeveloped, partially wooded land to the west.	Aerial Photographs and Topographic Maps
1959	Additional areas of agricultural land (citrus) are present on southern portions of the Subject Property, with one suspected wellhouse developed to the east. Residential development is present to the east. The remaining Subject Property vicinity appears predominantly unchanged.	Aerial Photograph
1968 - 1982	The Subject Property is comprised of wooded to partially wooded land to the north, and agricultural land (citrus) on central and southern portions of the Subject Property. The suspected residence and wellhouse appear to have been removed from the Subject Property by 1968. The immediately adjoining properties appear predominantly unchanged.	Aerial Photographs and Topographic Maps
1985	Northern portions of the Subject Property appear to have been cleared, with one retention pond developed. Areas of agricultural land (citrus) remain present on central and southern portions of the Subject Property. The immediately adjoining properties appear predominantly unchanged.	Aerial Photograph

Year	Description	Source
1995 - 1996	The Subject Property is comprised of pastureland, a retention pond, and residence to the north; suspected temporary trailers to the east; suspected barn structures to the west; and agricultural land (citrus) to the south. The immediately adjoining properties are comprised of partially wooded land and Lillian Lee Road to the north, with pastureland beyond; Puffin Road to the east with a residence and agricultural land (citrus) beyond; and agricultural land (citrus) to the south and west.	Aerial Photographs
1999	One suspected mobile home is present on a central portion of the Subject Property and an additional residence is present to the south. Areas of agricultural land (citrus) remain present on southern portions of the Subject Property. The immediately adjoining properties appear predominantly unchanged.	Aerial Photograph
2007 - 2015	The Subject Property is comprised of pastureland and partially wooded land, with a retention pond and residence to the north and a residence to the east. The immediately adjoining properties appear predominantly unchanged.	Aerial Photographs and Topographic Maps
2019 - 2023	The Subject Property is comprised of pastureland and partially wooded land, with a retention pond, residence, and shed structure to the north, and a residence and two shed structures to the east. The immediately adjoining properties are comprised of cleared land and Lillian Lee Road to the north, with agricultural land (citrus) beyond; Puffin Road to the east with residential development beyond; wooded land to the south; and cleared land for residential development to the west.	Aerial Photographs and Topographic Maps

SUBJECT PROPERTY HISTORICAL USE SUMMARY

The Subject Property existed as partially wooded land with areas of agricultural land (citrus) and an eastern suspected residence from at least 1944 until additional areas of agricultural land were developed to the south by 1959. A retention pond was developed on a northern portion of the Subject Property by 1985, and a residence was developed to the north by 1995. An additional residence was developed on an eastern portion of the Subject Property by 1999, and areas of agriculutral land (citrus) remained on southern portions of the Subject Property until 2007. The Subject Property remained comprised of pastureland and partially wooded land with northern and eastern residences until the present.

Historical agricultural activity on the Subject Property would have likely included the use of legal agricultural products such as pesticides, fungicides, herbicides, and/or fertilizers. The legal application (i.e., in accordance with manufacturer's specifications and customary practices) of such substances, in the course of standard operational practices does not constitute a "release to the environment." Therefore, the mere presence of this historical land use does not meet the definition of a REC.

HISTORICAL USE OF ADJOINING SITES

The Subject Property vicinity existed predominantly as agricultural land (citrus) with residential areas from at least 1944 until 2019, when additional residential development began on eastern and western adjoining properties.

6 RECORD REVIEW

PREVIOUS ENVIRONMENTAL REPORTS

SCS was provided with a previous Phase I ESA report completed by Universal Engineering Sciences (UES) on December 5, 2023, for the Subject Property. No RECs were identified for the Subject Property during UES's Phase I ESA. A copy of the previous Phase I ESA will be available upon request.

LOCAL AGENCY RECORDS

SCS submitted Freedom of Information Act (FOIA) requests to and/or accessed readily available information maintained by the following agencies:

- Florida Department of Environmental Protection – Central District
- Florida Department of Health

Environmental records associated with utilities (i.e., septic systems, wells, etc.), hazardous and solid waste, water, air, remediation activities, emergency responses, spills/releases, underground and aboveground storage tanks were requested from the above-referenced regulatory agencies. It should be noted that summarized information received from the agencies is not intended to be all inclusive of the complete files obtained from the agencies; but only to briefly summarize significant findings.

FDEP directed SCS to search online resources such as Map Direct and OCULUS. No listings were found for the Subject Property and vicinity.

No other agency responses were received prior to completion of the Phase I ESA. The documentation will be reviewed once received. Once reviewed, if it is identified that the documentation changes the findings or conclusions of this Phase I ESA, the documentation will be summarized and submitted in a separate letter. It should be noted that if the FOIA documentation is not received within 20 days of the date of this Phase I ESA, the requested information is considered not reasonably ascertainable.

National Pipeline Mapping System

SCS reviewed the National Pipeline Mapping System (NPMS) website for the Subject Property and surrounding area to identify any hazardous materials pipelines. The NPMS is a geographic information system (GIS) created by the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA), and Office of Pipeline Safety (OPS) in cooperation with other federal and state governmental agencies and the pipeline industry. The NPMS consists of

geospatial data, attribute data, public contact information, and metadata pertaining to the interstate and intrastate hazardous liquid trunklines and hazardous liquid low-stress lines, as well as gas transmission pipelines, liquefied natural gas (LNG) plants, and hazardous liquid breakout tanks (tanks that receive and store liquids transported by pipeline) jurisdictional to PHMSA. The nominal accuracy of geospatial data in the NPMS is ±500 feet. The NPMS does not contain information on interconnects, pump and compressor stations, valves, direction of flow, capacity, throughput, or operating pressure. In addition, distribution and gathering pipelines are not included in the NPMS.

The NPMS is built from data submitted by pipeline, LNG plant, and breakout tank facility operators. Since 2002, transmission pipeline and LNG plant facility operators are required to submit mapping information to the NPMS and to update their submissions annually. Breakout tank operators are able to submit data to the NPMS on a voluntary basis.

Based on review of the NPMS website, there are no hazardous materials pipelines within one-half mile of the Subject Property.

DATABASE SEARCH

A database search for sites listed on various federal, state, tribal, and local databases in the area around the Subject Property was obtained from EDR (February 8, 2024). A description of each of the databases searched is included in the report, which is attached as **Appendix E**. Among the databases included in the EDR report are NPL (federal, tribal, and state-equivalent), proposed and delisted NPL, CORRACTS (RCRA facilities subject to corrective actions), hazardous waste sites identified for investigation or remediation (SEMS [Superfund Enterprise Management System, formerly known as CERCLIS], State CERCLIS, VCP, Brownfields, etc.), LUST, sites with engineering controls, former CERCLIS (NFRAP), RCRA and state hazardous waste generators, ERNS, SWLF, and USTs.

Review of these records satisfies all requirements as set forth in 40 CFR Section 312.26 (b) and (c) with regard to the review of federal, tribal, and state government records of databases of such government records and local government records and databases of such records pertaining to both the Property and the nearby or adjoining properties. Further, the search distances for each particular database are as specified in 40 CFR 312.26 and ASTM E1527-21. SCS evaluated the following factors to determine whether additional environmental records should be reviewed with respect to the potential for contaminant migration from the adjoining and surrounding properties:

1. Whether the property is upgradient or downgradient of the subject property related to potential groundwater migration based on the local topography, and the assumed (or known) groundwater depth and shallow groundwater flow direction;
2. Whether the property is upgradient or downgradient of the Subject Property related to potential vapor migration based on readily available information pursuant to the ASTM E 1527-21 standard including soil and geological characteristics; contaminant characteristics; contaminated plume migration data; and significant conduits that might provide preferential pathways for vapor migration such as major utility corridors, sanitary sewers, storm sewers, and significant natural conduits such as Karst terrain (vapor migration may also be influenced by the age and design of infrastructure features associated with these conduits);
3. Property case status (i.e., whether the state environmental agency or applicable regulatory authority has issued a No Further Action letter or other similar closure document);
4. Type of database and whether the presence of contamination is known; and
5. The distance between the listed property and the Subject Property.

Based on this evaluation, SCS limited the review of additional environmental records to the properties listed below because the other properties are considered to have a low potential for contamination to migrate to the subject property. The distances and directions listed in this report have been field verified and might not always match those in the EDR report. Please refer to **Appendix E** for further information on these sites.

Subject Property Listings

The Subject Property was not listed in any of the databases searched by EDR.

Adjoining Site Listings

No adjoining sites appeared in the EDR database report.

Other Database Sites

The EDR report provides a summary table of regulatory database sites within specified distances of the Property, including standard environmental records, additional environmental records, high risk historical records, and recovered governmental records. This summary table is provided within the EDR report (**Appendix E**). Three sites were identified within 0.25 miles of the Property and listed in the AST, UST, and EDB databases. Based on a review of the facility information, none of these sites are known to have any contamination at this time; therefore, none are anticipated to have negatively affected the environmental condition of the Subject Property. None of the sites situated beyond 0.25 miles are anticipated to have impacted the Subject Property.

Unmappable or Orphan Sites

EDR designates unmappable sites as facilities that it has been unable to locate with adequate precision to determine whether the site is pertinent to the ESA of the Subject Property. No unmappable or orphan sites were identified in the EDR report.

VAPOR ENCROACHMENT ASSESSMENT

The Vapor Encroachment Standard (ASTM E2600-22) is conservative in nature as it presumes that a Vapor Encroachment Condition (VEC) does exist at a site until the presence of a VEC can affirmatively be ruled out. For a VEC to be ruled out, known or probable impacts to soil or groundwater from VOCs should not be suspected or documented at the Subject Property or nearby sites.

Due to the unlikely presence of contamination from the current or historical types and/or uses of the Subject Property and vicinity, a VEC can be ruled out.

7 USER PROVIDED INFORMATION

The following information is the responsibility of the User (40 CFR 312.22) and is not included in this Phase I ESA:

- Identification of environmental cleanup liens against the Subject Property.
- Specialized knowledge or experience of the User.
- The relationship of the purchase price to the fair market value of the Subject Property.

A User Questionnaire was not returned to SCS for inclusion in the report; however, the User provided a previous Phase I ESA report completed for the Subject Property, which is discussed in Section 6 of this report. A copy of the previous Phase I ESA will be available upon request.

TITLE RECORDS

No title report was provided to SCS for review.

ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS

No information regarding environmental liens or activity and use limitations was provided to SCS. No environmental liens or activity/use limitations were identified by SCS during the course of this assessment.

SPECIALIZED KNOWLEDGE OR EXPERIENCE

No specialized knowledge regarding the Property was provided to SCS by the User.

VALUATION REDUCTION FOR ENVIRONMENTAL ISSUES

No property valuation information was provided to SCS.

8 DATA GAPS AND DEVIATIONS

Certain other limitations could affect the accuracy and completeness of this report, as follows:

- Outstanding Information Requests – Not all responses have been received from the FOIA requests prior to completion of the Phase I ESA. Information will be reviewed once received, and, if it is identified that the documentation changes the conclusions in this Phase I ESA, the documentation will be summarized and submitted in a separate letter provided to the Client. SCS does not consider this to be a significant data gap.
- Historical Data Sources Failure – SCS attempted to review the referenced historical sources (i.e., aerial photographs, topographic maps, city directories, etc.) in a minimum of five-year increments. Breaches in the sequence of reviewed sources are due to the limitations of the referenced collections. SCS does not consider this to be a significant data gap.
- User Questionnaire – SCS did not receive a completed user questionnaire during the course of this Phase I ESA. Although SCS did not receive a completed user questionnaire, a review of historical and regulatory database records did not identify any historical or current uses of the Subject Property that would constitute a REC. Therefore, the lack of a completed user questionnaire is not considered a significant data gap.

9 FINDINGS AND OPINIONS

Based on the scope of work performed, SCS finds the following:

The Subject Property is currently owned by Arma Investments, LP; Walter Malukiewicz; and Christine M. Novy, and encompasses approximately 17.7 acres of land. The Subject Property is comprised of partially wooded land, with one residence, storage shed, and pond to the north; one residence and two shed structures to the east; one central mobile home; and a pole barn structure to the west. The areas surrounding the Subject Property consist of undeveloped land and Lillian Lee Road to the

north, with agricultural land (citrus) beyond; Puffin Road to the east, with residences and wooded land beyond; wooded land to the south; and residences to the west.

A review of historical records indicated that the Subject Property existed as partially wooded land with areas of agricultural land (citrus) and an eastern suspected residence from at least 1944 until additional areas of agriculaturla land were developed to the south by 1959. A retention pond was developed on a northern portion of the Subject Property by 1985, and a residence was developed to the north by 1995. An additional residence was developed on an eastern portion of the Subject Property by 1999, and areas of agricultural land (citrus) remained on southern portions of the Subject Property until 2007. The Subject Property remained comprised of pastureland and partially wooded land with northern and eastern residences until the present. Such agricultural activity on the Subject Property would have likely included the use of legal agricultural products such as pesticides, fungicides, herbicides, and/or fertilizers. The legal application (i.e., in accordance with manufacturer's specifications and customary practices) of such substances, in the course of standard operational practices does not constitute a "release to the environment." Therefore, the mere presence of this historical land use does not meet the definition of a REC.

SCS reviewed commercially available regulatory database listings for sites listed on various federal, state, and tribal databases for the Subject Property and vicinity. The Subject Property was not identified in any of the ASTM specified federal, state, or local database listings.

SCS was provided with a previous Phase I ESA report completed by UES on December 5, 2023, for the Subject Property. No RECs were identified for the Subject Property during UES's Phase I ESA. A copy of the previous Phase I ESA will be available upon request.

10 CONCLUSIONS

In summary, SCS performed a Phase I ESA of the Nona Townhomes property in conformance with the scope and limitations of 40 CFR 312 and ASTM E1527-21 and Client, if any. Any exceptions or deviations are described in Section 8 of this report.

In the opinion of the Environmental Professionals, this assessment has revealed no RECs, controlled RECs, historical RECs, or significant data gaps in connection with the Subject Property.

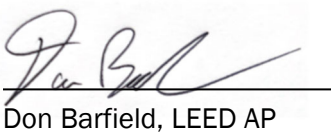
11 DECLARATION OF ENVIRONMENTAL PROFESSIONAL

This Phase I ESA report for the Nona Townhomes property, located at 1820, 1850, and 1860 Puffin Road in St. Cloud, Osceola County, Florida and dated February 28, 2024, was prepared by Claire Fraley and reviewed by Don Barfield.

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312. The resumes for the individuals below are included in **Appendix F**.



Claire Fraley
Project Manager
SCS ENGINEERS



Don Barfield, LEED AP
Project Director
SCS ENGINEERS

12 REFERENCES

ASTM International, November 1, 2021. Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Designation: E1527-21.

Environmental Data Resources, Inc. (EDR), Certified Sanborn® Map Report, Inquiry Number 7564488.3, February 8, 2024.

EDR, The EDR Aerial Photo Decade Package, Inquiry Number 7564488.8, February 12, 2024.

EDR, The EDR – City Directory Image Report, Inquiry Number 7564488.5, February 13, 2024.

EDR, The EDR Historical Topo Map Report, Inquiry Number 7564488.4, February 8, 2024.

EDR, The EDR Radius Map Report with GeoCheck®, Inquiry Number 7564488.2s, February 8, 2024.

Florida Department of Environmental Protection (FDEP) Consolidated NEXUS Electronic Document Management System, http://prodenv.dep.state.fl.us/DepNexus/public/searchPortal

FDEP Contamination Locator Map, http://prodenv.dep.state.fl.us/DepClnup/welcome.do

Google Earth Pro Aerial Imagery, https://earth.google.com/web/, accessed February 9, 2024.

National Pipeline Mapping System (NPMS) Website: https://www.npms.phmsa.dot.gov/PublicViewer/, accessed February 9, 2024.

Osceola County Property Appraiser, https://www.property-appraiser.org/, accessed February 28, 2024.

United States Geological Survey (USGS), Narcoossee, Florida, 2021, 7.5 Minute Topographic Map.

13 GLOSSARY

AAI – All Appropriate Inquiry

AUL – Activity and Use Limitations

BER – Business environmental risk. As defined in ASTM E1527-21, a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of commercial real estate, not necessarily related to those environmental issues required to be investigated in the ASTM E1527-21 practice.

BTEX – Benzene, toluene, ethylbenzene, and total xylenes

CERCLA – Comprehensive, Environmental Response, Compensation, and Liability Act

CERCLIS – Comprehensive Environmental Response, Compensation, and Liability Information System

CFR – Code of Federal Regulations

CORRACTS – Corrective Action Against Responsible Parties at a RCRA site

CREC – Controlled Recognized Environmental Condition. As defined in ASTM E1527-21, a recognized environmental condition affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority, or authorities with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls (for example, activity use limitations, or other property use limitations).

De Minimis Condition – A condition related to a release that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. A condition determined to be a *de minimis condition* is not a recognized environmental condition nor a controlled recognized environmental condition.

EDR – Environmental Data Resources, Inc.

ERNS – Emergency Response Notification System

ESA – Environmental Site Assessment

FINDS – Facility Index System

HREC – Historical Recognized Environmental Condition. As defined in ASTM E1527-21, a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls (for example, activity use limitations or other property use limitations).

LQG – Large Quantity Hazardous Waste Generator

LUST – Leaking Underground Storage Tank

MCL – Maximum contaminant level

MTBE – Methyl-tert-butyl-ether

NFA – No Further Action determination

NFRAP – No Further Remedial Action Planned

NPL – National Priority List (Superfund)

PAHs – Polynuclear aromatic hydrocarbons

PCBs – Polychlorinated biphenyls

RCRA – Resource Conservation and Recovery Act

RCRIS – Resource Conservation and Recovery Information System

REC – Recognized environmental condition. As defined by ASTM E1527-21, a REC means (1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment. A *de minimis condition* is not a recognized environmental condition.

ROD – Record of Decision

RBSLs – Risk-based Screening Levels

RSLs – Regional Screening Levels

SARA – Superfund Amendments and Reauthorization Act

SQG – Small Quantity Hazardous Waste Generator

SWIS – Solid Waste Information System

SWLF – Solid Waste Facility/Landfills

TPH – Total Petroleum Hydrocarbons

TRIS – Toxic Release Inventory System

TSD – Treatment, Storage, and/or Disposal Facility

User – As defined in ASTM E1527-21, the party seeking to use Practice E1527 to complete an environmental site assessment of the subject property.

U.S. EPA – United States Environmental Protection Agency

USGS – United States Geologic Survey

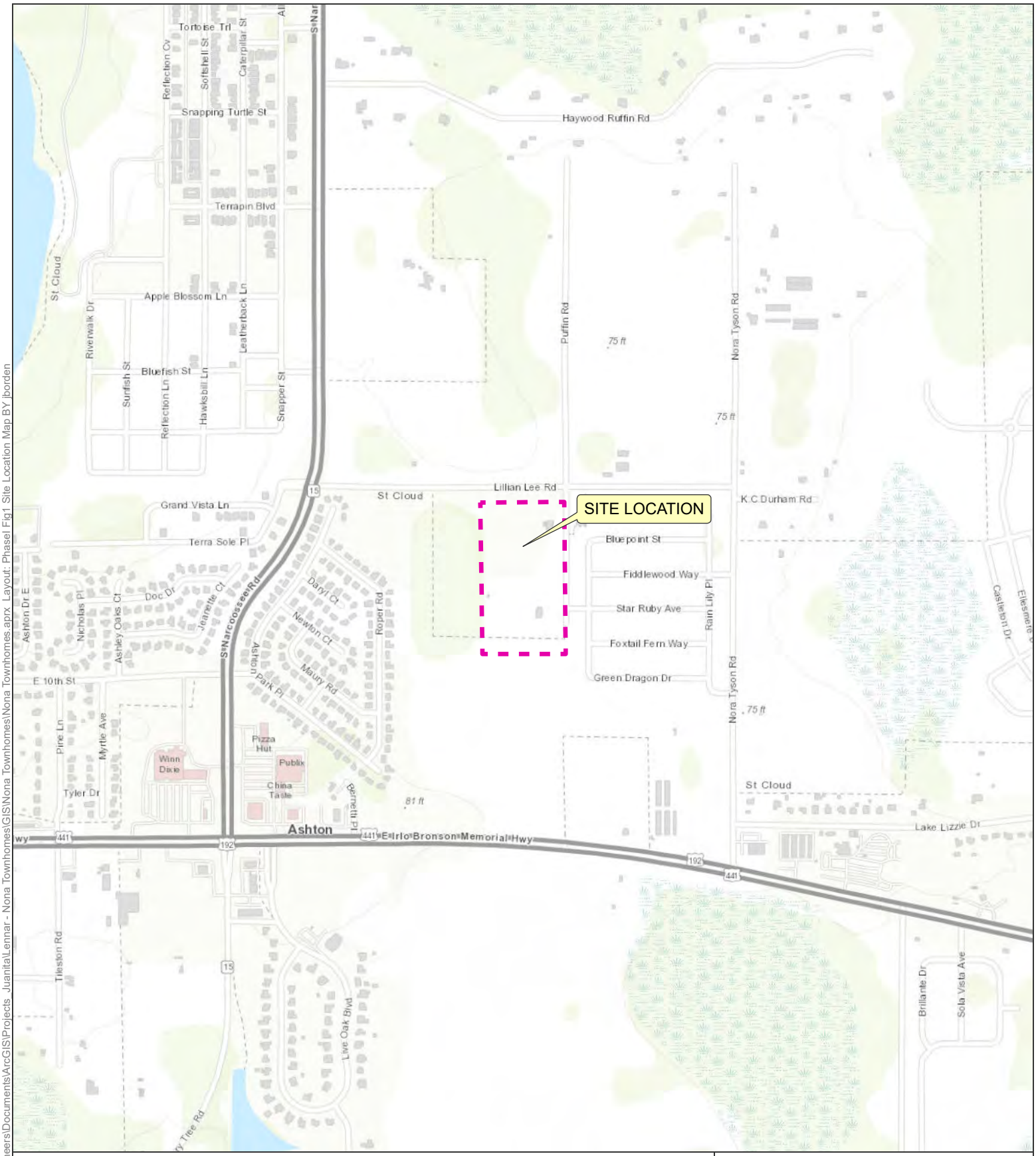
UST – Underground Storage Tank

VCP – Voluntary Cleanup Program

VOCs – Volatile organic compounds

Appendix A

Figures



Legend

Approximate Site Boundary

N
W E
S

0 500 1,000
Feet

1 inch = 1,000 feet

Site Location Map

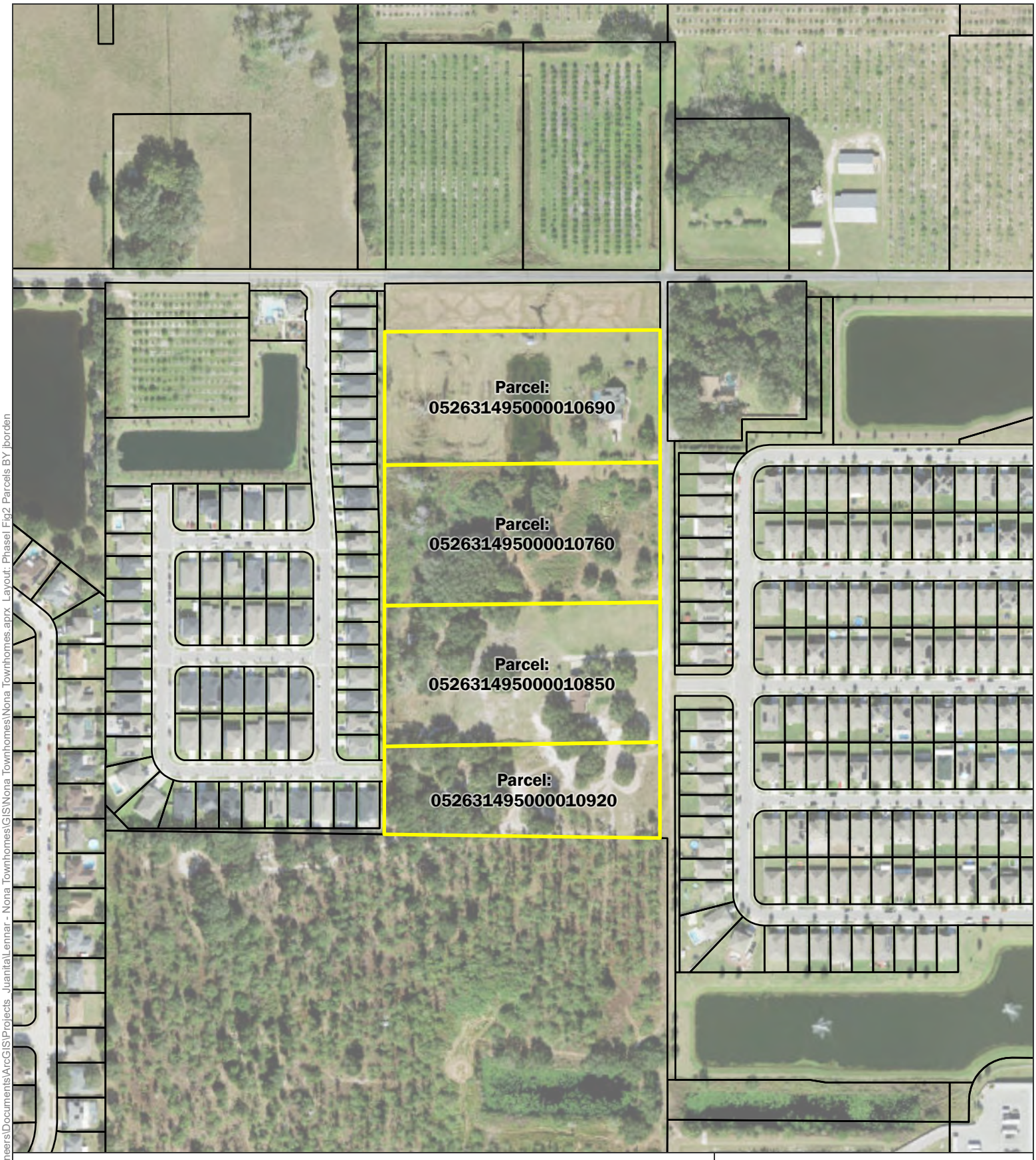
Nona Townhomes
1820 and 1860 Puffin Road
St. Cloud, Osceola County, Florida

Figure 1	February 2024

SCS ENGINEERS

C:\Users\jborden\OneDrive - SCS Engineers\Documents\ArcGIS\Projects_Juanita\Lennar - Nona Townhomes\GIS\Nona Townhomes.aprx Layout: Phase1 Fig1 Site Location Map BY jborden

Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA



Legend

- Subject Parcels
- Osceola County Parcels

N
W E
S

0 150 300
Feet

1 inch = 300 feet

Parcel Map

Nona Townhomes
1820 and 1860 Puffin Road
St. Cloud, Osceola County, Florida

Figure 2	February 2024

SCS ENGINEERS

C:\Users\jborden\OneDrive - SCS Engineers\Documents\ArcGIS\Projects_Juanita\Lennar - Nona Townhomes\GIS\Nona Townhomes\Nona Townhomes.aprx Layout: Phase1 Fig2 Parcels BY jborden

State of Florida, Maxar



Legend

Approximate Site Boundary

N
W E
S

0 100 200
Feet

1 inch = 200 feet

Existing Site Conditions

Nona Townhomes
1820 and 1860 Puffin Road
St. Cloud, Osceola County, Florida

Figure 3	February 2024

SCS ENGINEERS

C:\Users\jborden\OneDrive - SCS Engineers\Documents\ArcGIS\Projects_Juanita\Lennar - Nona Townhomes\GIS\Nona Townhomes.aprx Layout: Phase1 Fig3 Site Conditions BY jborden

State of Florida, Maxar, Microsoft

Appendix B

Photographs



Description	Representative view of northern portions of the Subject Property.	1



Description	View of a potable well located on a northern portion of the Subject Property.	2

		
Description	View of a mobile home located on a central portion of the Subject Property.	3
		
Description	View of residential areas on eastern portions of the Subject Property.	4



Description	View of a pole barn located on a western portion of the Subject Property.	5



Description	Representative view of southern portions of the Subject Property.	6

Appendix C

Owner/Operator Questionnaire

No. _____

OWNER/OPERATOR QUESTIONNAIRE

Site address: 1820 Puffin Road, St. Cloud, FL 34771

Interviewee: Name – Chrissy Malukiewicz

Title – Property Owner

Date: 2/3/2024

SECTION I – Undeveloped Property (If this site is developed, go to SECTION II)

1. How long have you owned (or been involved in) this property?
   Owner of property since March 2006

2. To the best of your knowledge, has there ever been any development on this property? If yes, what and when was the nature of that development?

   No development outside of building our home in 2005

3. To the best of your knowledge, have there ever been any environmental or soils investigations conducted on this Property? If yes, what kind and when? Are there any reports available?

   No

4. Are you aware of any environmental liens or deed restrictions associated with this property? If yes, please describe.

   No

5. To the best of your knowledge, have there ever been any incidents of chemical spills/dumping or waste disposal on or close to this property?

   No

6. Are there any wells on the site? If yes, what are they used for?

   Yes, we have a well we use for our water.

SECTION II – Developed Property

1. What is your involvement with this property and when did that involvement begin?

2. To the best of your knowledge, how long has the current development been on the property? What was there before the current development?

3. Does this facility use, store, manufacture, or dispose of chemicals or petroleum products? What types (be as specific as possible)?

4. If the answer to Question 3 above was "Yes," may we review MSDS, business plans, hazardous material inventories, manifest files, SPCC plans (whatever is applicable)?

5. Do you have any environmental permits (wastewater discharge, air emissions, hazardous material storage, etc.)? Have there ever been any Notices of Violation in regards to any of these permits?

6. Have any environmental investigations ever been conducted on this property? When and why? Are there any reports available that we can review?

7. Has the facility ever been subject to an environmental health and safety regulatory action, complaint, or lawsuit? When and why? What was the outcome?

8. Have there been any know chemical spills or releases on this property?

9. Are there any underground or aboveground storage tanks on this property? How many? Sizes? Ages?

10. Where is wastewater discharged to? To the best of your knowledge, have there ever been any on-site wastewater disposal systems (septic tank, leach field, cesspool, dry well, etc.)?

11. To the best of your knowledge, are there any environmental liens or deed restrictions associated with this property? If yes, please describe.

No. _____

OWNER/OPERATOR QUESTIONNAIRE

Site address: 1850 - 1860 Puffin Road, St. Cloud, FL 34771

Interviewee: Name - Anil Jasuja

Title - Managing Partner

Date: Feb 2, 2024

SECTION I – Undeveloped Property (If this site is developed, go to SECTION II)

1. How long have you owned (or been involved in) this property?

   Feb 2021

2. To the best of your knowledge, has there ever been any development on this property? If yes, what and when was the nature of that development?

   N/A

3. To the best of your knowledge, have there ever been any environmental or soils investigations conducted on this Property? If yes, what kind and when? Are there any reports available?

   N/A

4. Are you aware of any environmental liens or deed restrictions associated with this property? If yes, please describe.

   N/A

5. To the best of your knowledge, have there ever been any incidents of chemical spills/dumping or waste disposal on or close to this property?

   N/A

6. Are there any wells on the site? If yes, what are they used for?

   N/A

SECTION II – Developed Property

1. What is your involvement with this property and when did that involvement begin?

2. To the best of your knowledge, how long has the current development been on the property? What was there before the current development?

3. Does this facility use, store, manufacture, or dispose of chemicals or petroleum products? What types (be as specific as possible)?

4. If the answer to Question 3 above was "Yes," may we review MSDS, business plans, hazardous material inventories, manifest files, SPCC plans (whatever is applicable)?

5. Do you have any environmental permits (wastewater discharge, air emissions, hazardous material storage, etc.)? Have there ever been any Notices of Violation in regards to any of these permits?

6. Have any environmental investigations ever been conducted on this property? When and why? Are there any reports available that we can review?

7. Has the facility ever been subject to an environmental health and safety regulatory action, complaint, or lawsuit? When and why? What was the outcome?

8. Have there been any know chemical spills or releases on this property?

9. Are there any underground or aboveground storage tanks on this property? How many? Sizes? Ages?

10. Where is wastewater discharged to? To the best of your knowledge, have there ever been any on-site wastewater disposal systems (septic tank, leach field, cesspool, dry well, etc.)?

11. To the best of your knowledge, are there any environmental liens or deed restrictions associated with this property? If yes, please describe.

Appendix D

Historical Property and Adjoining Site Use Information

Katrina S. Scarborough, CFA, CCF, MCF
Osceola County Property Appraiser
www.property-appraiser.org
Osceola County Government Center
2505 East Irlo Bronson Memorial Hwy, Kissimmee, FL 34744
Ph: (407) 742-5000 Fax:(407) 742-4900

Parcel: 05-26-31-4950-0001-0690



Owner Information

Owner Name	MALUKIEWICZ WALTER NOVY CHRISTINE M
Mailing Address	1820 PUFFIN RD SAINT CLOUD, FL 34771
Physical Address	1820 PUFFIN RD, SAINT CLOUD FL 34771
Description	SINGLE FAMILY-IMPROVED
Tax District	300 - OSCEOLA COUNTY

Tax Values

Current Values		Certified Values	
Current Value represents working appraised values as of 02/27/2024, which are subject to change prior to certification		**Certified Value represents certified values that appeared on the tax roll as of 10/04/2023**	
Land	$148,200	**Land**	$148,200
AG Benefit	$0	**AG Benefit**	$0
Extra Features	$32,500	**Extra Features**	$31,100
Buildings	$285,700	**Buildings**	$287,600
Appraised(just)	$466,400	**Appraised(just)**	$466,900
Assessed(estimated)	$338,202	**Assessed***	$328,352
Exemption(estimated)	$50,000	**Exemption**	$50,000
Taxable(estimated)	$288,202	**Taxable**	$278,352
*** Assessed Values Reflect Adjustments for Agricultural Classification and/or the Save Our Homes Cap**		*** Assessed Values Reflect Adjustments for Agricultural Classification and/or the Save Our Homes Cap**	

Sales Information

Seq	ORB-Pg	Price	Date	Deed Type
0	2825-2048	$240,000	2005-06-24	WD
1	1158-2037	$45,000	1993-11-30	WD
2	0863-0994	$0	1987-06-01	SW
3	0185-0446	$0	1968-12-31	WD

Land Information - Total Acreage: 4.63

Land Description	Units	Depth	Land Type	Land Value
RURAL ACREAGE	4.63	0.00	AC	$148,200

Extra Features

Extra Feature	Units	Year Built	Feature Value
FIREPLACE-PREFABRICATED AVERAGE	1	2006	$1,369
SWIMMING POOL(IN GROUND ONLY) GOOD	435	2014	$24,708
POOL DECK GOOD	730	2014	$2,436
SCREEN ENCLOSURE AVERAGE	2449	2014	$3,980

Building Information

Building 1

Description	SINGLE FAMILY	**Bedrooms**	4
Year Built	2006	**Bathrooms**	2
Value	$285,700	**Fixtures**	
Actual Area	3529	**Roof Cover**	4 COMPOSITE SHINGLE
Heated Area	2479	**Exterior Wall**	(1.00) 10 CONCRETE BLOCK STUCCO

Building 1 subarea

Description	Code	Year Built	Total Sketched Area
BASE AREA	BAS	2006	2479
SCREEN PORCH FINISHED	SPF	2006	360
OPEN PORCH FINISHED	OPF	2006	140
GARAGE FINISHED	GRF	2006	550

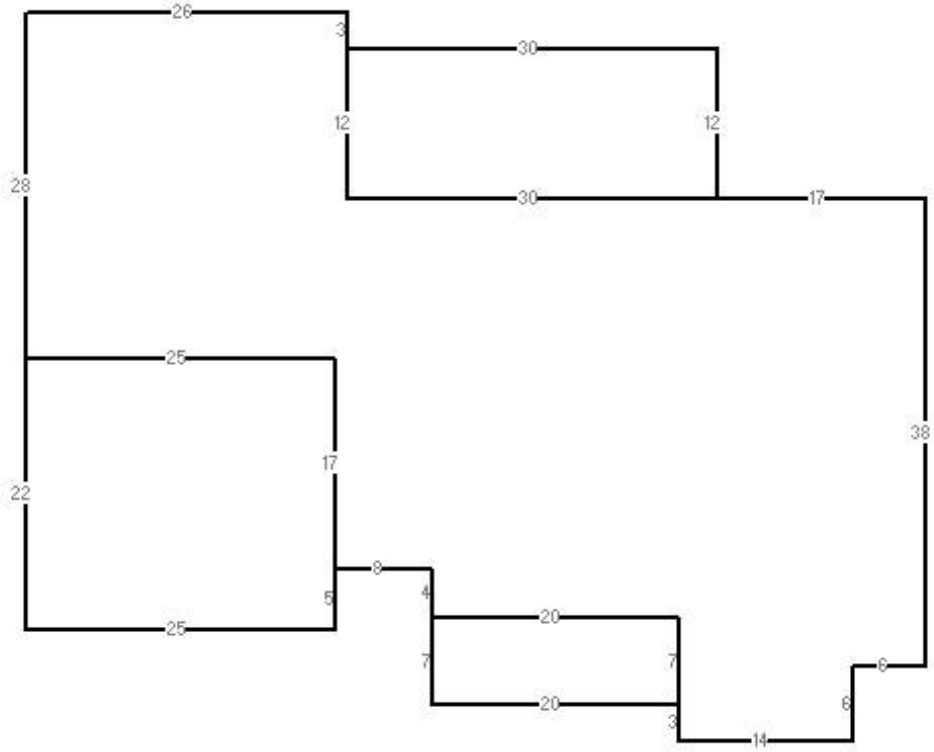
Legal Description

Legal Description S L & I C PB B PG 22 LOT 69 LESS N 17.5 FT

Building 1 Property Photo



Building 1 Sketch



Katrina S. Scarborough, CFA, CCF, MCF
Osceola County Property Appraiser
www.property-appraiser.org
Osceola County Government Center
2505 East Irlo Bronson Memorial Hwy, Kissimmee, FL 34744
Ph: (407) 742-5000 Fax:(407) 742-4900

Parcel: 05-26-31-4950-0001-0760



Owner Information

Owner Name	ARMA INVESTMENTS LP
Mailing Address	2910 S SHERIDAN WAY OAKVILLE, ON L6J 7L9 CANADA
Physical Address	1850 PUFFIN RD, SAINT CLOUD FL 34771
Description	MOBILE HME-IMPROVED
Tax District	100 - ST CLOUD

Tax Values

Current Values		Certified Values	
Current Value represents working appraised values as of 02/27/2024, which are subject to change prior to certification		**Certified Value represents certified values that appeared on the tax roll as of 10/04/2023**	
Land	$156,200	**Land**	$156,200
AG Benefit	$0	**AG Benefit**	$0
Extra Features	$5,200	**Extra Features**	$5,300
Buildings	$74,500	**Buildings**	$74,500
Appraised(just)	$235,900	**Appraised(just)**	$236,000
Assessed(estimated)	$235,900	**Assessed***	$235,950
Exemption(estimated)	$0	**Exemption**	$0
Taxable(estimated)	$235,900	**Taxable**	$235,950
*** Assessed Values Reflect Adjustments for Agricultural Classification and/or the Save Our Homes Cap**		*** Assessed Values Reflect Adjustments for Agricultural Classification and/or the Save Our Homes Cap**	

Sales Information

Seq	ORB-Pg	Price	Date	Deed Type
0	5900-0586	$396,600	2021-02-26	WD
1	4902-1023	$522,000	2016-01-11	WD
2	2864-1743	$285,000	2005-08-05	WD
3	1159-2660	$75,000	1993-12-07	WD
4	0863-0994	$0	1987-06-23	SW

Land Information - Total Acreage: 4.89

Land Description	Units	Depth	Land Type	Land Value
RURAL ACREAGE	4.88	0.00	AC	$156,200

Extra Features

Extra Feature	Units	Year Built	Feature Value
CHAIN LINK FENCE-5 FT HIGH AVERAGE	500	1993	$1,200
PREFABRICATED SHED AVERAGE	253	1990	$759
PREFABRICATED SHED AVERAGE	288	1992	$864
CHAIN LINK FENCE-4 FT HIGH AVERAGE	50	1993	$100
WOOD DECK AVERAGE	100	1992	$200
POLEBARN AVERAGE	864	1996	$2,074

Building Information

Building 1

Description	MOBILE HOME	**Bedrooms**	3
Year Built	1992	**Bathrooms**	2
Value	$74,500	**Fixtures**	
Actual Area	1718	**Roof Cover**	4 COMPOSITE SHINGLE
Heated Area	1718	**Exterior Wall**	(1.00) 23 VINYL SIDING

Building 1 subarea

Description	Code	Year Built	Total Sketched Area
BASE AREA	BAS	1992	1718
METAL PORCH UNFINISHED	MPU	1992	64
METAL PORCH UNFINISHED	MPU	1992	100

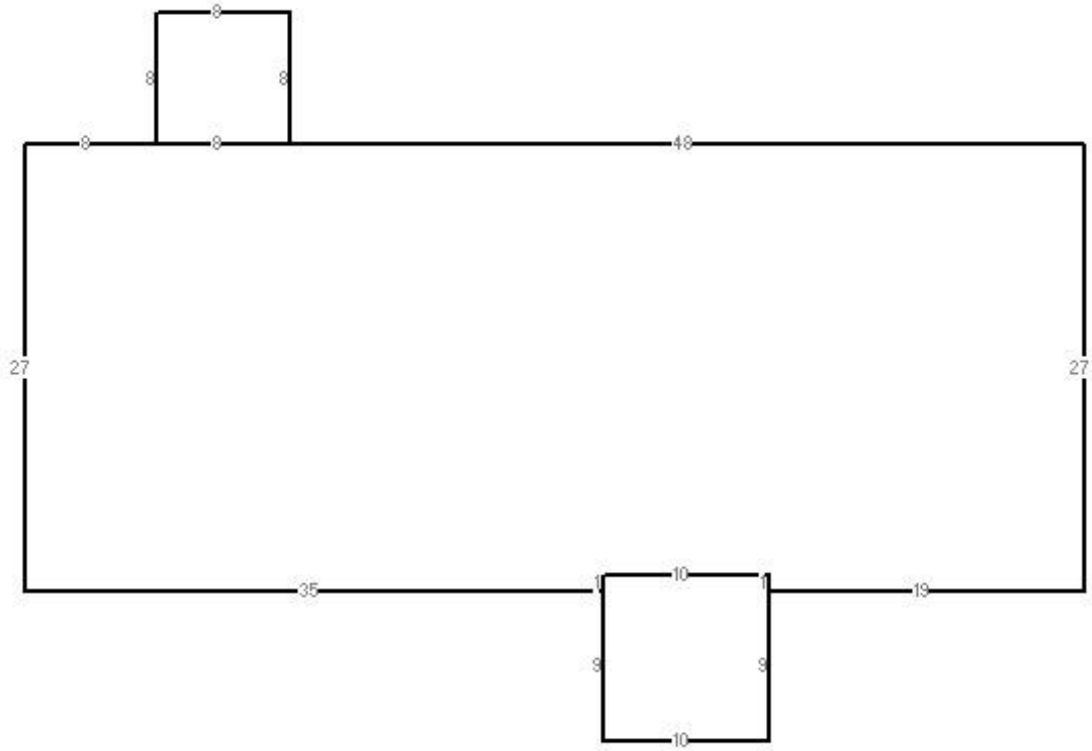
Legal Description

Legal Description	S L & I C PB B PG 22 LOT 76

Building 1 Property Photo



Building 1 Sketch



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Ph: (407) 742-5000 Fax:(407) 742-4900

Parcel: 05-26-31-4950-0001-0850



Owner Information

Owner Name	ARMA INVESTMENTS LP
Mailing Address	2910 S SHERIDAN WAY OAKVILLE, ON L6J 7L9 CANADA
Physical Address	1860 PUFFIN RD, SAINT CLOUD FL 34771
Description	SINGLE FAMILY-IMPROVED
Tax District	100 - ST CLOUD

Tax Values

Current Values		Certified Values	
Current Value represents working appraised values as of 02/27/2024, which are subject to change prior to certification		**Certified Value represents certified values that appeared on the tax roll as of 10/04/2023**	
Land	$157,100	**Land**	$155,800
AG Benefit	$0	**AG Benefit**	$0
Extra Features	$500	**Extra Features**	$500
Buildings	$235,900	**Buildings**	$237,600
Appraised(just)	$393,500	**Appraised(just)**	$393,900
Assessed(estimated)	$393,500	**Assessed***	$393,900
Exemption(estimated)	$0	**Exemption**	$0
Taxable(estimated)	$393,500	**Taxable**	$393,900
*** Assessed Values Reflect Adjustments for Agricultural Classification and/or the Save Our Homes Cap**		*** Assessed Values Reflect Adjustments for Agricultural Classification and/or the Save Our Homes Cap**	

Sales Information

Seq	ORB-Pg	Price	Date	Deed Type
0	5900-0586	$396,600	2021-02-26	WD
1	4902-1023	$522,000	2016-01-11	WD
2	2553-0062	$350,000	2004-07-02	WD
3	1375-0343	$131,000	1997-01-13	WD
4	1353-0162	$43,000	1996-09-25	WD

Land Information - Total Acreage: 4.91

Land Description	Units	Depth	Land Type	Land Value
RURAL ACREAGE	4.91	0.00	AC	$157,100

Extra Features

Extra Feature	Units	Year Built	Feature Value
PREFABRICATED SHED AVERAGE	80	1997	$240
PREFABRICATED SHED AVERAGE	96	1997	$288

Building Information

Building 1

Description	SINGLE FAMILY	**Bedrooms**	3
Year Built	1996	**Bathrooms**	2
Value	$235,900	**Fixtures**	
Actual Area	3311	**Roof Cover**	4 COMPOSITE SHINGLE
Heated Area	2524	**Exterior Wall**	(1.00) 10 CONCRETE BLOCK STUCCO

Building 1 subarea

Description	Code	Year Built	Total Sketched Area
BASE AREA	BAS	1996	1636
GARAGE FINISHED	GRF	1996	483
OPEN PORCH FINISHED	OPF	1996	304
METAL SCREEN PORCH UNFINISHED	MSU	2002	456
BASE AREA	BAS	2002	888

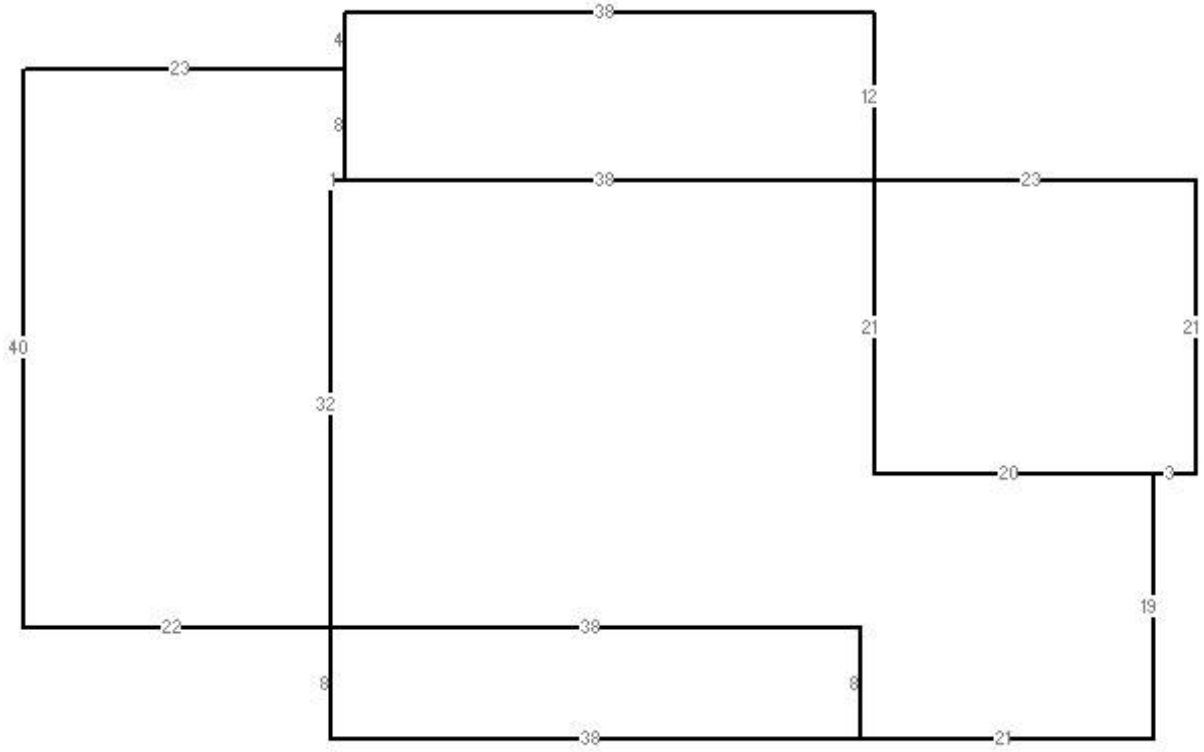
Legal Description

Legal Description	S L & I C PB B PG 22 LOT 85

Building 1 Property Photo



Building 1 Sketch



Katrina S. Scarborough, CFA, CCF, MCF
Osceola County Property Appraiser
www.property-appraiser.org
Osceola County Government Center
2505 East Irlo Bronson Memorial Hwy, Kissimmee, FL 34744
Ph: (407) 742-5000 Fax:(407) 742-4900

Parcel: 05-26-31-4950-0001-0920

Owner Information

Owner Name	ARMA INVESTMENTS LP
Mailing Address	2910 S SHERIDAN WAY OAKVILLE, ON L6J 7L9 CANADA
Physical Address	PUFFIN RD, SAINT CLOUD FL 34771
Description	VACANT
Tax District	100 - ST CLOUD

Tax Values

Current Values		Certified Values	
Current Value represents working appraised values as of 02/27/2024, which are subject to change prior to certification		**Certified Value represents certified values that appeared on the tax roll as of 10/04/2023**	
Land	$103,000	**Land**	$99,200
AG Benefit	$0	**AG Benefit**	$0
Extra Features	$0	**Extra Features**	$0
Buildings	$0	**Buildings**	$0
Appraised(just)	$103,000	**Appraised(just)**	$99,200
Assessed(estimated)	$103,000	**Assessed***	$99,200
Exemption(estimated)	$0	**Exemption**	$0
Taxable(estimated)	$103,000	**Taxable**	$99,200
*** Assessed Values Reflect Adjustments for Agricultural Classification and/or the Save Our Homes Cap**		*** Assessed Values Reflect Adjustments for Agricultural Classification and/or the Save Our Homes Cap**	

Sales Information

Seq	ORB-Pg	Price	Date	Deed Type
0	5900-0586	$396,600	2021-02-26	WD
1	4902-1023	$522,000	2016-01-11	WD
2	2908-1553	$200,000	2005-09-02	WD
3	1406-2113	$35,000	1997-05-20	WD

Land Information - Total Acreage: 3.22

Land Description	Units	Depth	Land Type	Land Value
RURAL ACREAGE	3.22	0.00	AC	$103,000

Legal Description

Legal Description S L & I C PB B PG 22 LOT 92

Nona Townhomes

1820, 1860 Puffin Road

Saint Cloud, FL 34771

Inquiry Number: 7564488.8

February 12, 2024

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

02/12/24

Site Name:

Nona Townhomes
1820, 1860 Puffin Road
Saint Cloud, FL 34771
EDR Inquiry # 7564488.8

Client Name:

SCS Engineers
9500 S. Dadeland Blvd Ste 610
Miami, FL 33156
Contact: Claire Fraley

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2019	1"=500'	Flight Year: 2019	USDA/NAIP
2015	1"=500'	Flight Year: 2015	USDA/NAIP
2010	1"=500'	Flight Year: 2010	USDA/NAIP
2007	1"=500'	Flight Year: 2007	USDA/NAIP
1999	1"=500'	Acquisition Date: January 01, 1999	USGS/DOQQ
1996	1"=500'	Flight Date: March 22, 1996	FDOT
1995	1"=500'	Acquisition Date: January 01, 1995	USGS/DOQQ
1985	1"=500'	Flight Date: February 13, 1985	USGS
1982	1"=500'	Flight Date: December 22, 1982	USGS
1977	1"=500'	Flight Date: November 27, 1977	USGS
1971	1"=500'	Flight Date: March 31, 1971	USGS
1968	1"=500'	Flight Date: April 16, 1968	USDA
1959	1"=500'	Flight Date: January 10, 1959	USDA
1951	1"=500'	Flight Date: April 05, 1951	USDA
1944	1"=500'	Flight Date: February 08, 1944	USDA

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INQUIRY #: 7564488.8
YEAR: 2019
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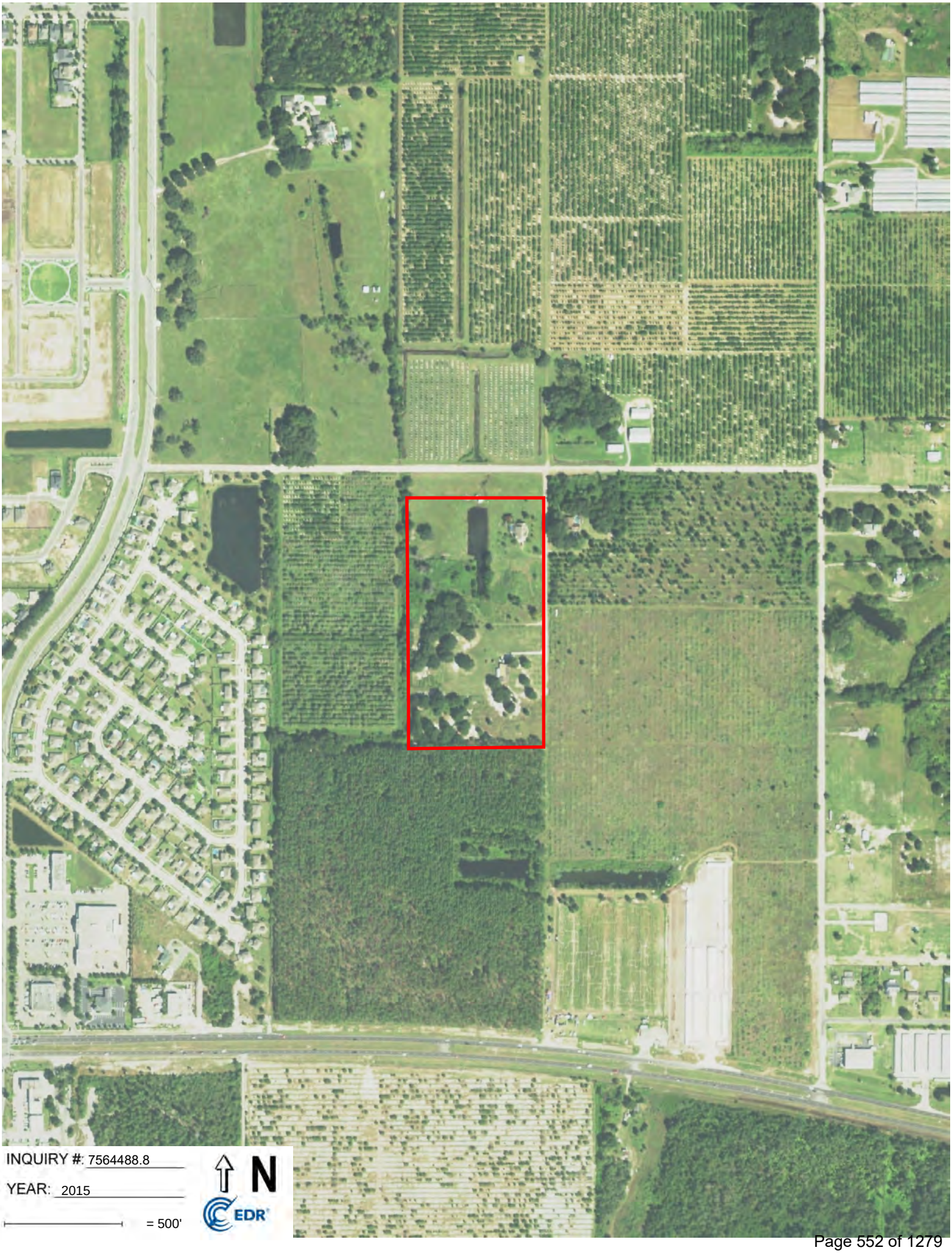
N
EDR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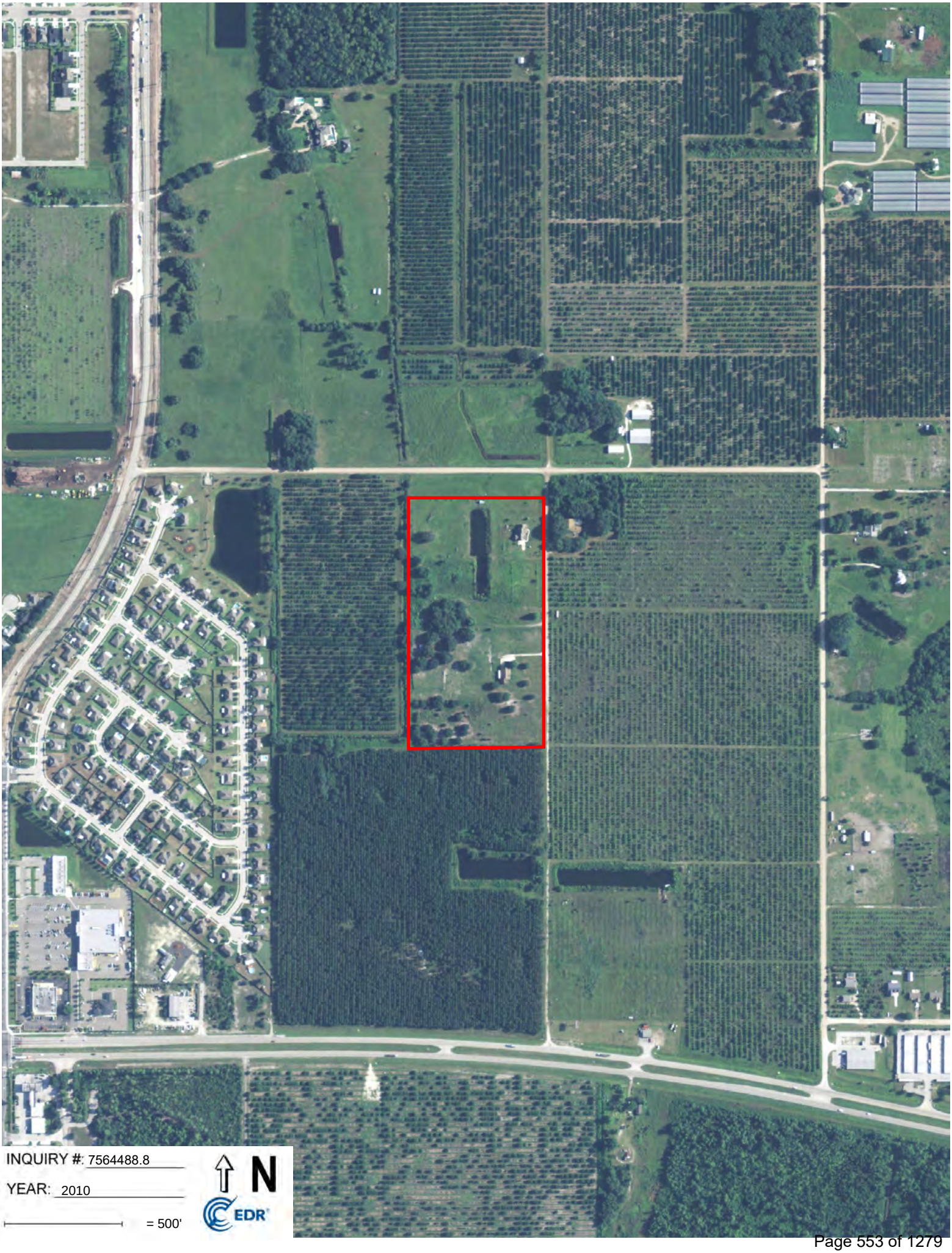
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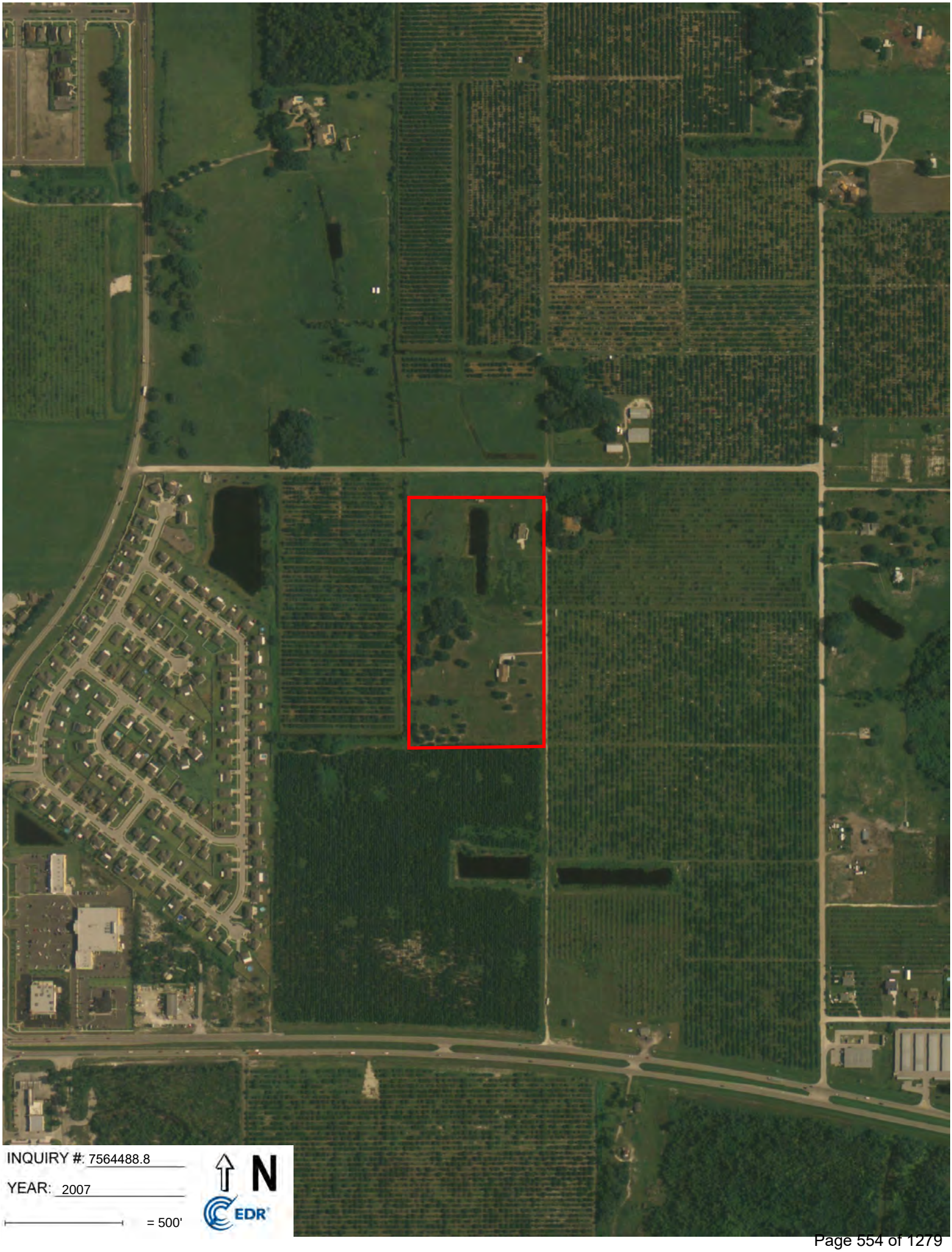
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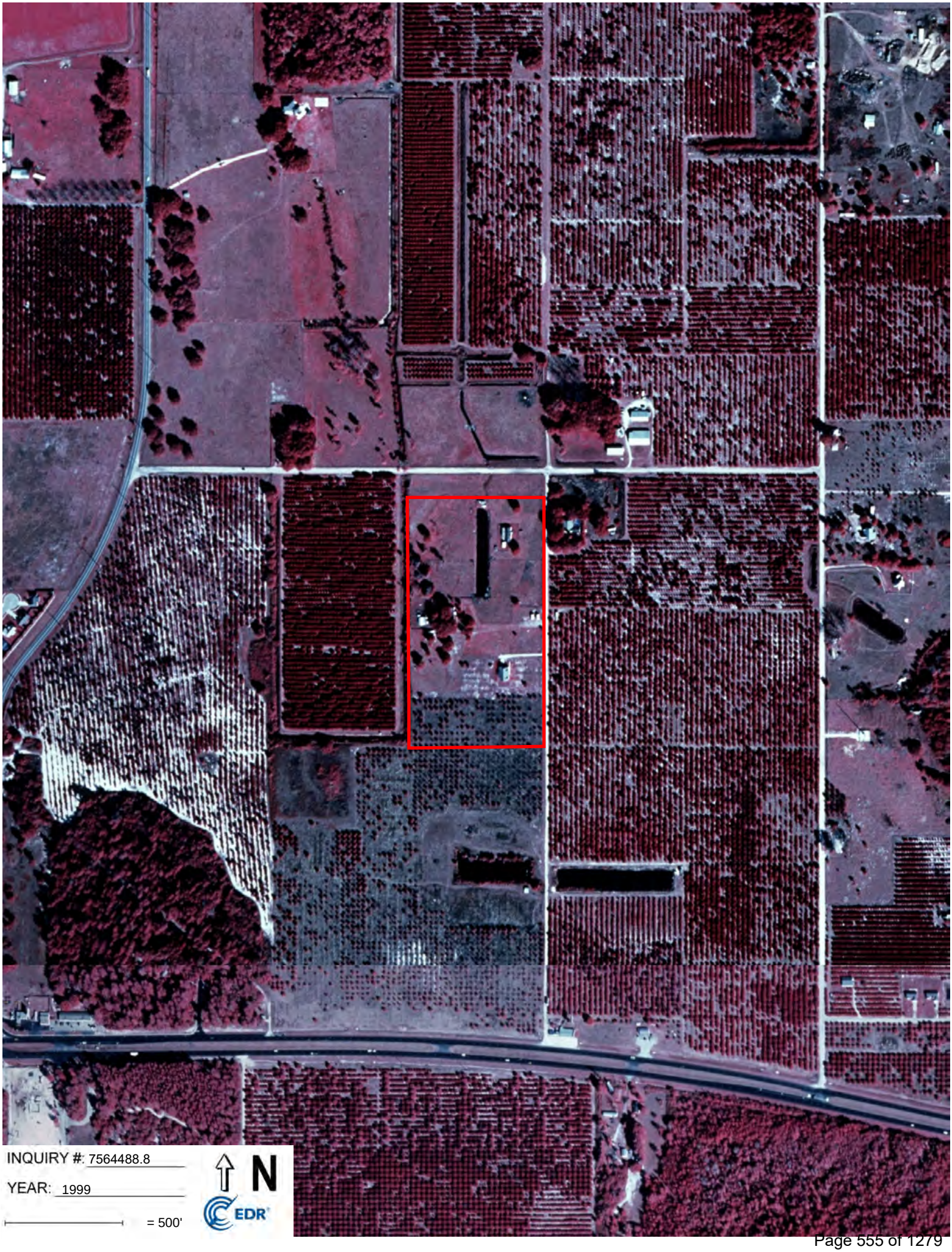
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EDR
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EDR


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YEAR: 1985
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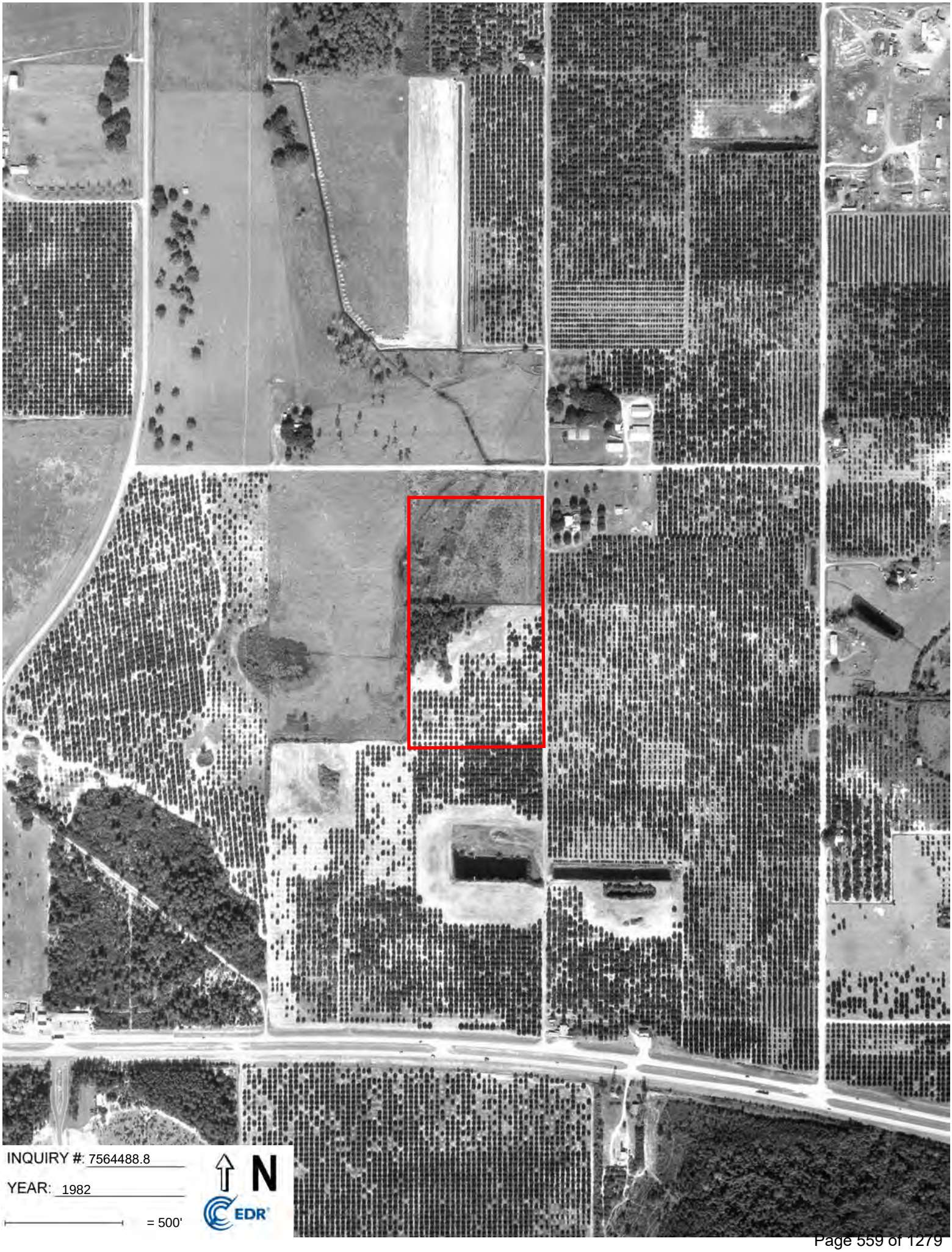
EDR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EDR


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YEAR: 1971
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EDR


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YEAR: 1968
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EDR


INQUIRY #: 7564488.8
YEAR: 1959
= 500'
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EDR


INQUIRY #: 7564488.8
YEAR: 1951
= 500'
N
EDR


INQUIRY #: 7564488.8
YEAR: 1944
= 500'
N
EDR

Nona Townhomes
1820, 1860 Puffin Road
Saint Cloud, FL 34771

Inquiry Number: 7564488.4
February 08, 2024

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

02/08/24

Site Name:	Client Name:
Nona Townhomes	SCS Engineers
1820, 1860 Puffin Road	9500 S. Dadeland Blvd Ste 610
Saint Cloud, FL 34771	Miami, FL 33156
EDR Inquiry # 7564488.4	Contact: Claire Fraley

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Search Results:		*Coordinates:*	
P.O.#	09224031.00	**Latitude:**	28.251185 28° 15' 4" North
Project:	Nona Townhomes	**Longitude:**	-81.236697 -81° 14' 12" West
		UTM Zone:	Zone 17 North
		UTM X Meters:	476781.51
		UTM Y Meters:	3125050.63
		Elevation:	74.00' above sea level

Maps Provided:

2021
2018
2015
2012
1980, 1981
1970
1953

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2021 Source Sheets



Narcoossee
2021
7.5-minute, 24000



Ashton
2021
7.5-minute, 24000



Saint Cloud North
2021
7.5-minute, 24000



Saint Cloud South
2021
7.5-minute, 24000

2018 Source Sheets



Narcoossee
2018
7.5-minute, 24000



Ashton
2018
7.5-minute, 24000



Saint Cloud North
2018
7.5-minute, 24000



Saint Cloud South
2018
7.5-minute, 24000

2015 Source Sheets



Narcoossee
2015
7.5-minute, 24000



Ashton
2015
7.5-minute, 24000



Saint Cloud North
2015
7.5-minute, 24000



Saint Cloud South
2015
7.5-minute, 24000

2012 Source Sheets



Narcoossee
2012
7.5-minute, 24000



Ashton
2012
7.5-minute, 24000



Saint Cloud North
2012
7.5-minute, 24000

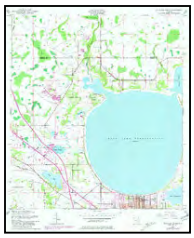


Saint Cloud South
2012
7.5-minute, 24000

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1980, 1981 Source Sheets



St. Cloud North
1980
7.5-minute, 24000
Aerial Photo Revised 1977



St Cloud South
1980
7.5-minute, 24000
Aerial Photo Revised 1977



St. Cloud South
1980
7.5-minute, 24000
Aerial Photo Revised 1977



Ashton
1981
7.5-minute, 24000
Aerial Photo Revised 1977

1970 Source Sheets



St Cloud North
1970
7.5-minute, 24000
Aerial Photo Revised 1970



Ashton
1970
7.5-minute, 24000
Aerial Photo Revised 1970



Narcoossee
1970
7.5-minute, 24000
Aerial Photo Revised 1970



St Cloud South
1970
7.5-minute, 24000
Aerial Photo Revised 1970

1953 Source Sheets



St Cloud South
1953
7.5-minute, 24000
Aerial Photo Revised 1950



Narcoossee
1953
7.5-minute, 24000
Aerial Photo Revised 1950



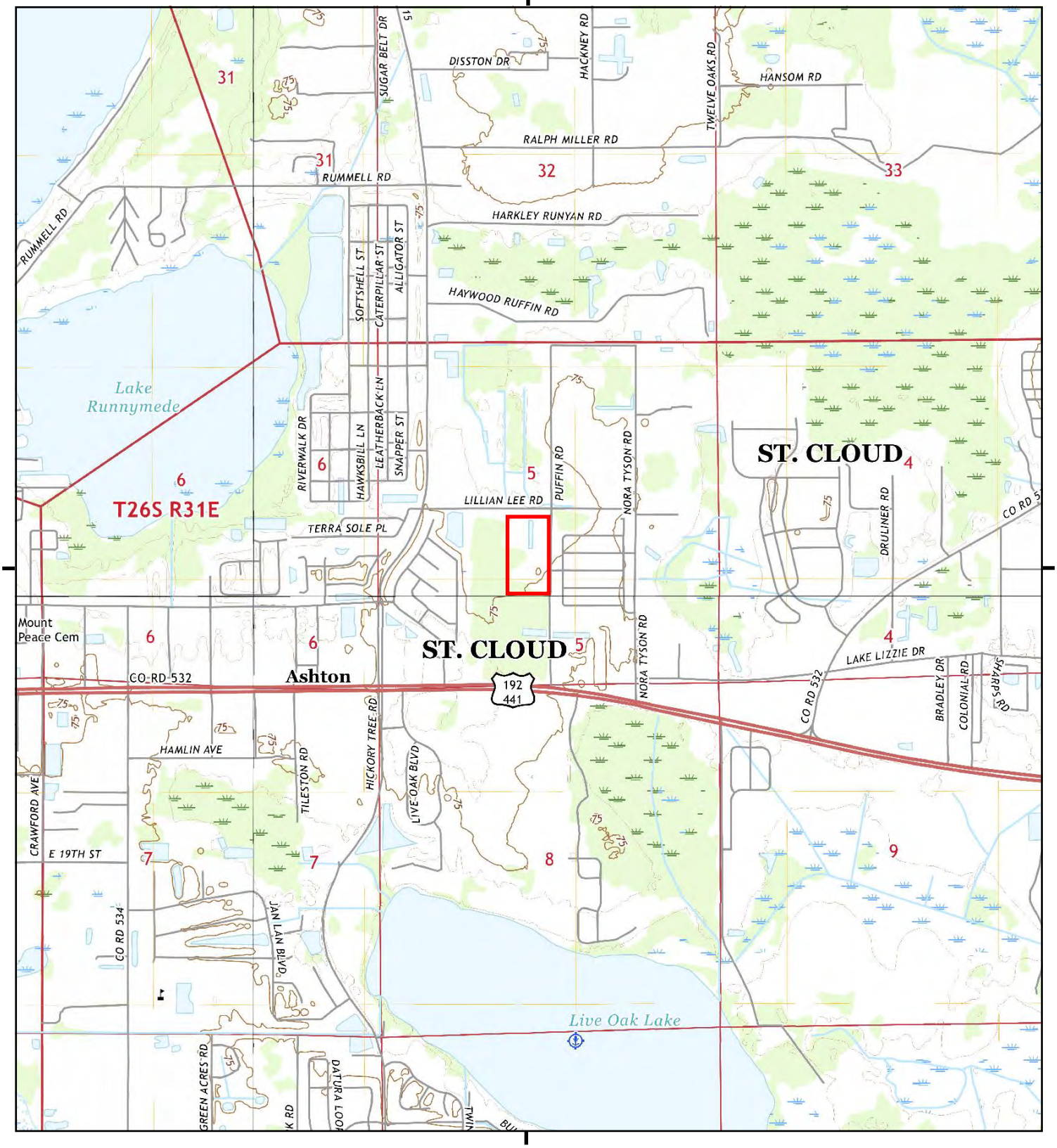
Ashton
1953
7.5-minute, 24000



St Cloud North
1953
7.5-minute, 24000
Aerial Photo Revised 1950

Historical Topo Map

2021



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Narcoossee, 2021, 7.5-minute
SE, Ashton, 2021, 7.5-minute
SW, Saint Cloud South, 2021, 7.5-minute
NW, Saint Cloud North, 2021, 7.5-minute

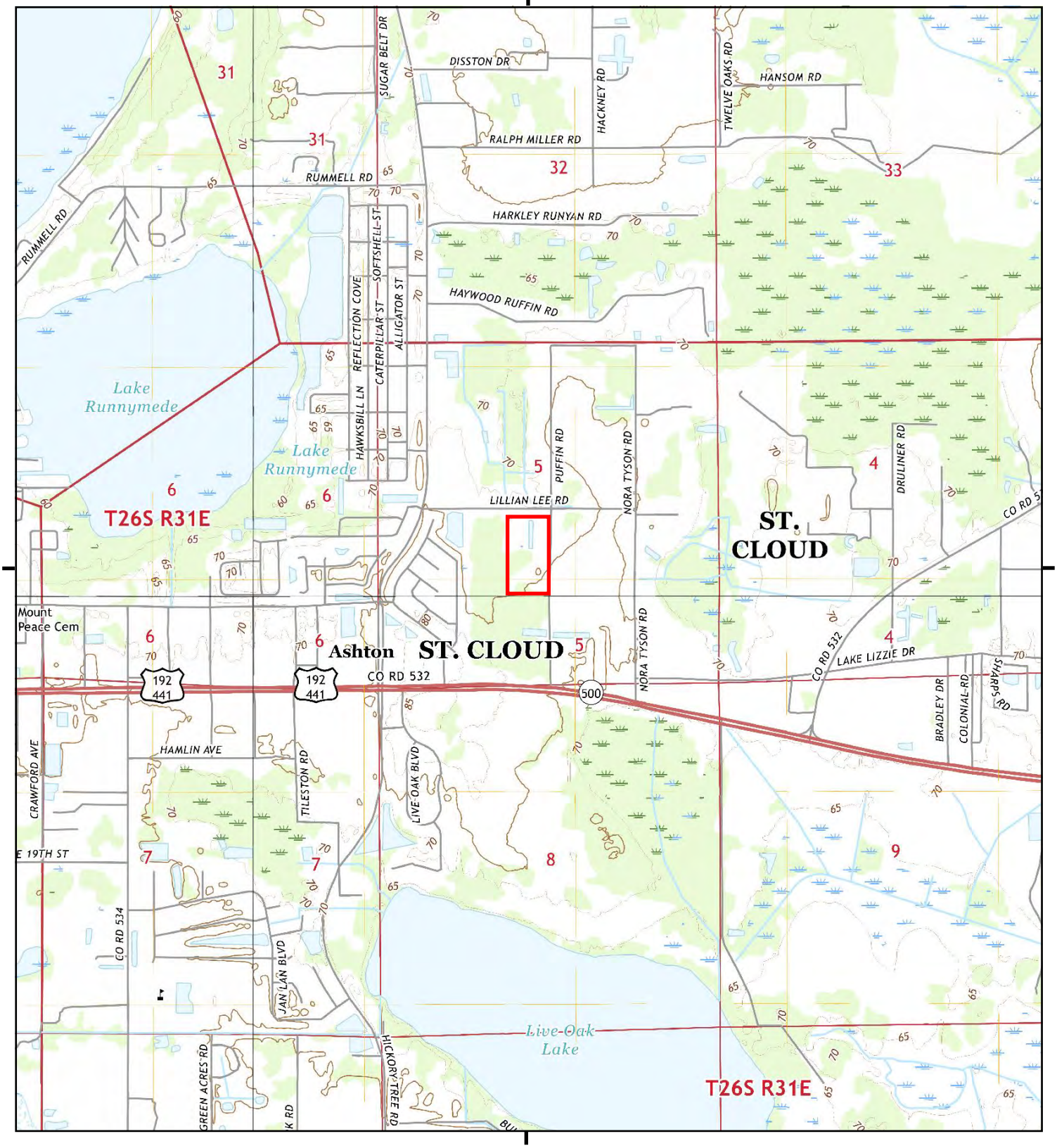
SITE NAME: Nona Townhomes
ADDRESS: 1820, 1860 Puffin Road
Saint Cloud, FL 34771
CLIENT: SCS Engineers

N

7564488 - 4 page 5

Historical Topo Map

2018



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

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W E
SW S SE

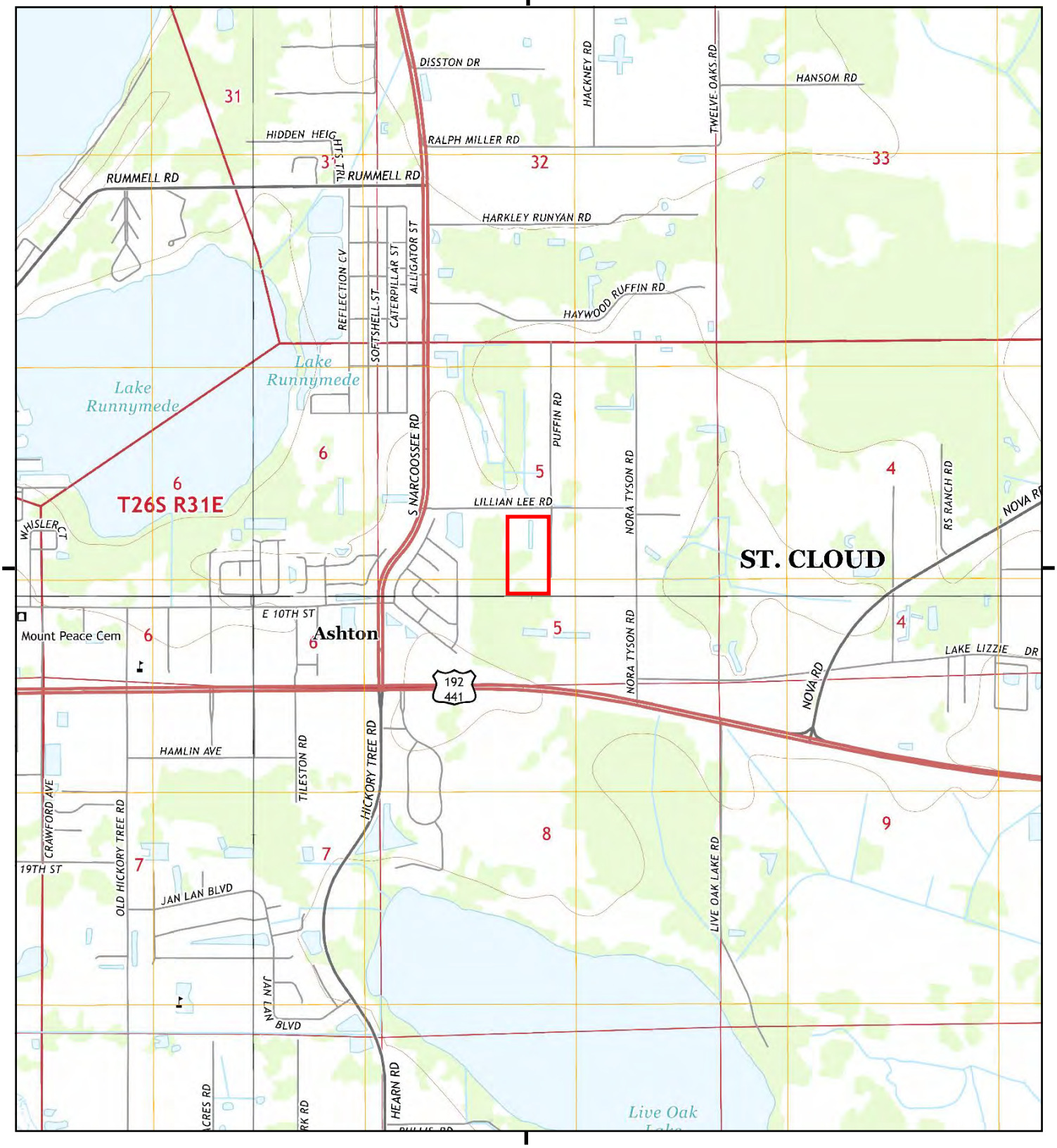
TP, Narcoossee, 2018, 7.5-minute
SE, Ashton, 2018, 7.5-minute
SW, Saint Cloud South, 2018, 7.5-minute
NW, Saint Cloud North, 2018, 7.5-minute

SITE NAME: Nona Townhomes
ADDRESS: 1820, 1860 Puffin Road
Saint Cloud, FL 34771
CLIENT: SCS Engineers

N

Historical Topo Map

2015



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

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W E
SW S SE

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SE, Ashton, 2015, 7.5-minute
SW, Saint Cloud South, 2015, 7.5-minute
NW, Saint Cloud North, 2015, 7.5-minute

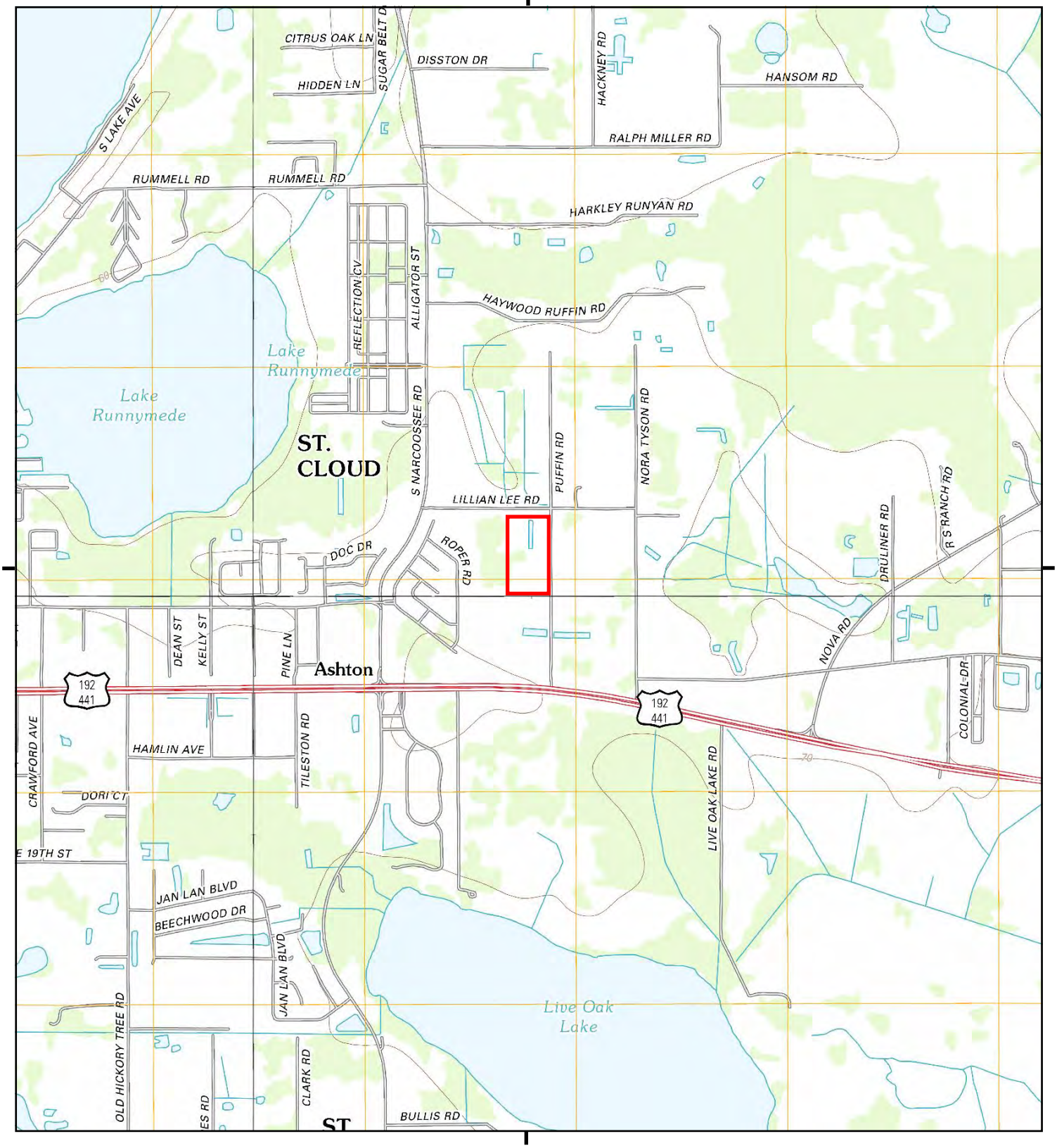
SITE NAME: Nona Townhomes
ADDRESS: 1820, 1860 Puffin Road
Saint Cloud, FL 34771
CLIENT: SCS Engineers

N

7564488 - 4 page 7

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

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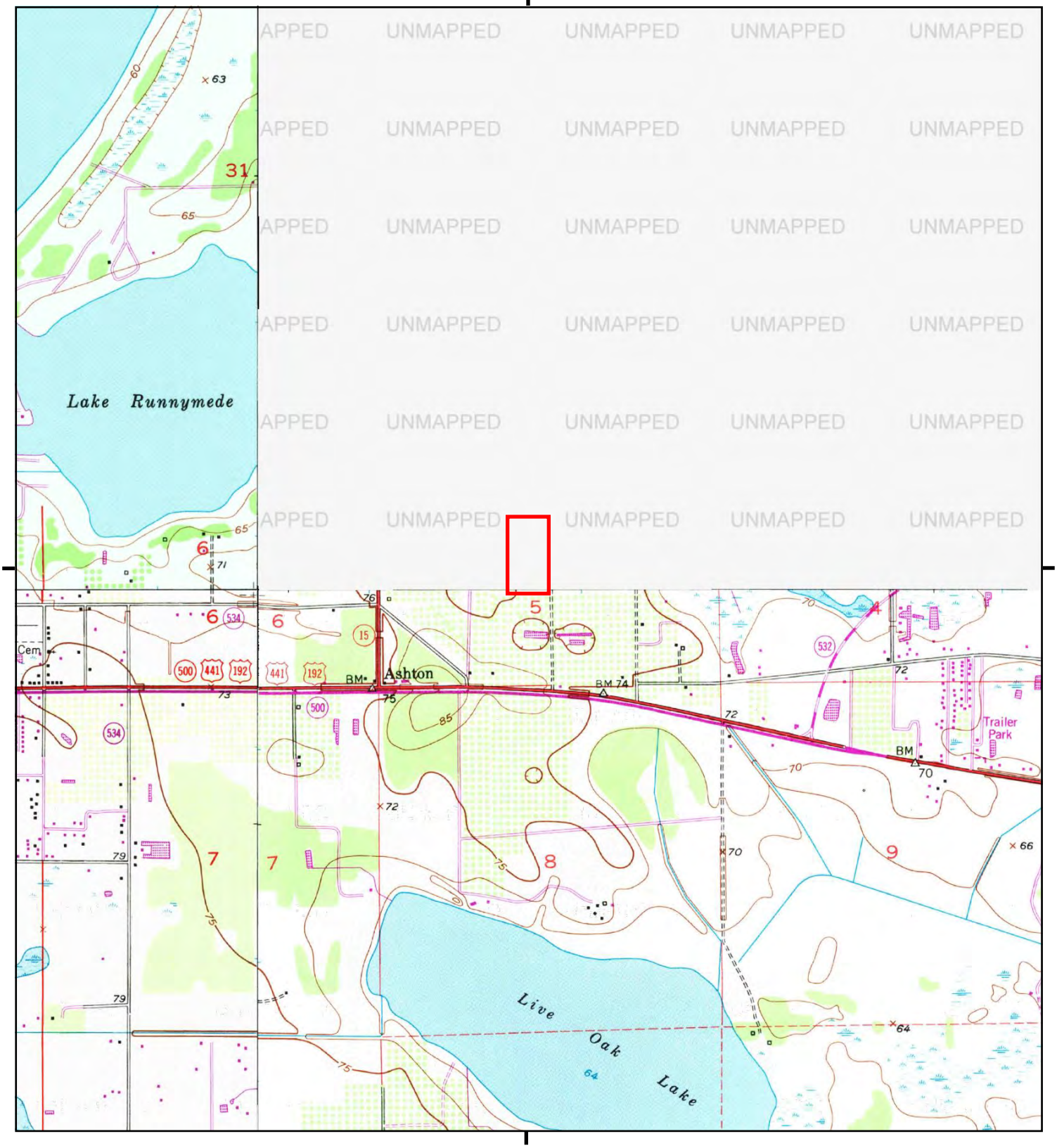
W E
SW S SE

TP, Narcoossee, 2012, 7.5-minute
SE, Ashton, 2012, 7.5-minute
SW, Saint Cloud South, 2012, 7.5-minute
NW, Saint Cloud North, 2012, 7.5-minute

SITE NAME: Nona Townhomes
ADDRESS: 1820, 1860 Puffin Road
Saint Cloud, FL 34771
CLIENT: SCS Engineers

N

7564488 - 4 page 8



This report includes information from the following map sheet(s).

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W E
SW S SE

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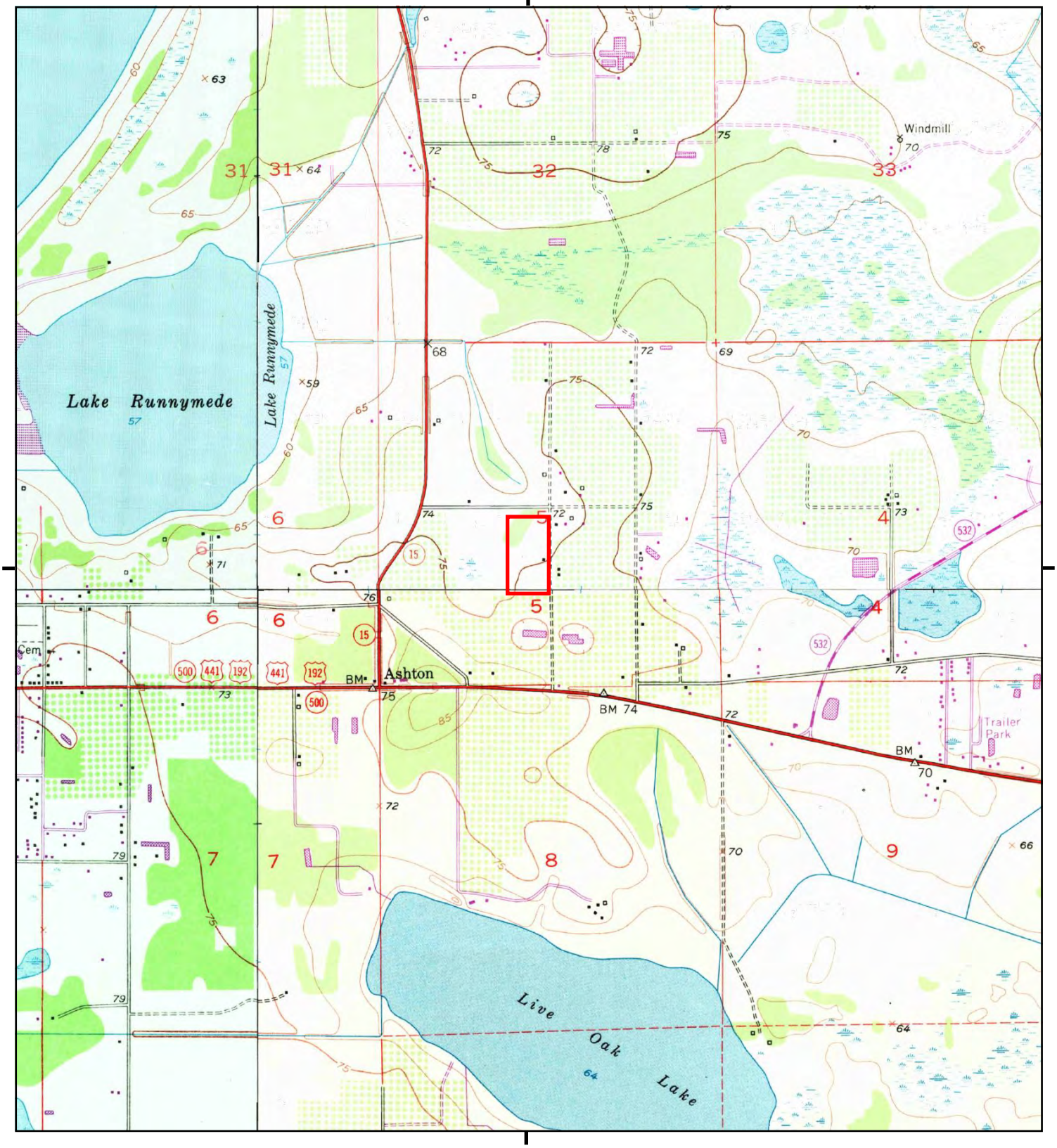
SW, St Cloud South, 1980, 7.5-minute
NW, St. Cloud North, 1980, 7.5-minute
SW, St. Cloud South, 1980, 7.5-minute

SITE NAME: Nona Townhomes
ADDRESS: 1820, 1860 Puffin Road
Saint Cloud, FL 34771
CLIENT: SCS Engineers

N

Historical Topo Map

1970



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

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SW S SE

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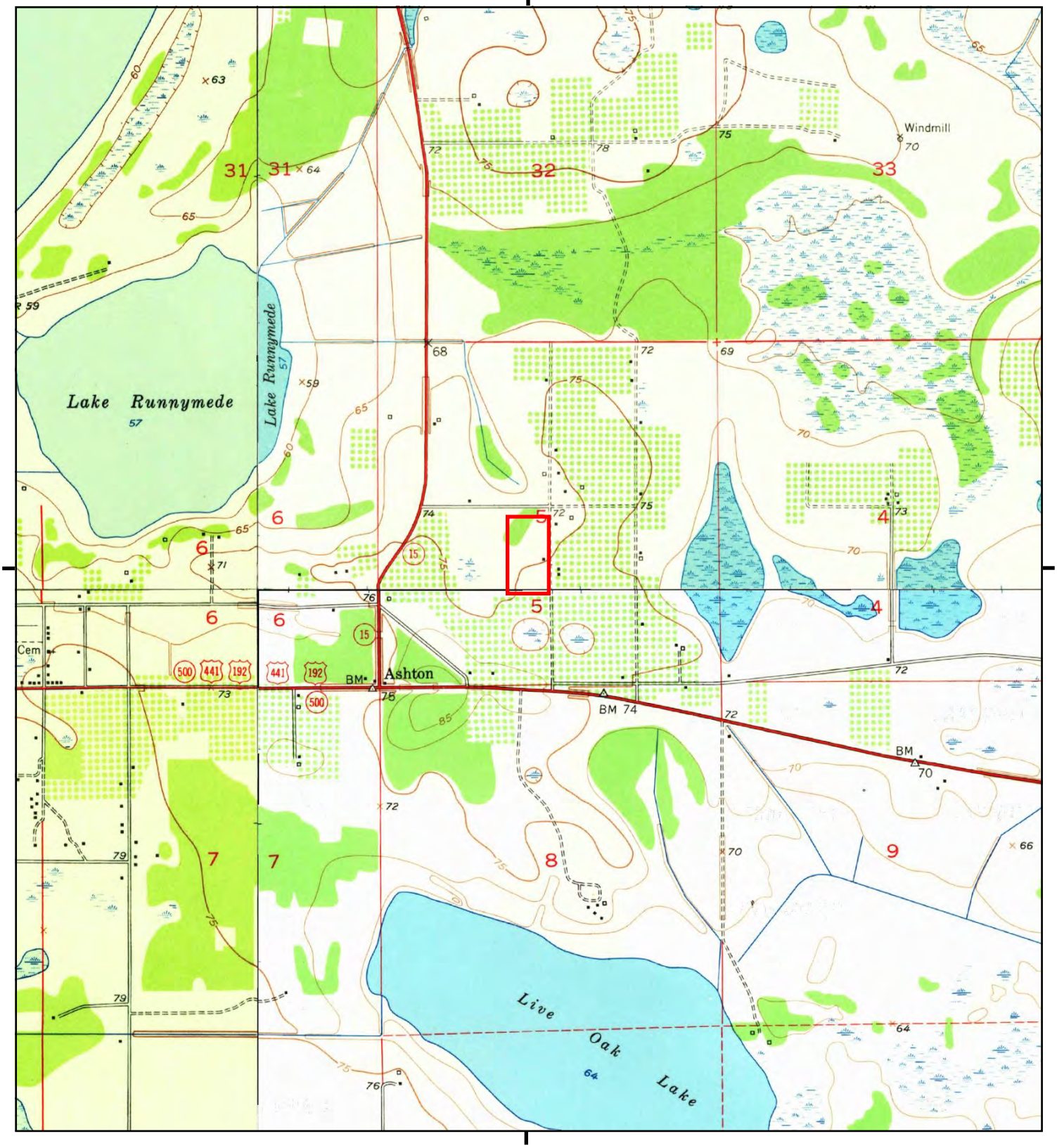
SE, Ashton, 1970, 7.5-minute
SW, St Cloud South, 1970, 7.5-minute
NW, St Cloud North, 1970, 7.5-minute

SITE NAME: Nona Townhomes
ADDRESS: 1820, 1860 Puffin Road
Saint Cloud, FL 34771
CLIENT: SCS Engineers

N



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0 Miles 0.25 0.5 1 1.5

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W E
SW S SE

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SW, St Cloud South, 1953, 7.5-minute
NW, St Cloud North, 1953, 7.5-minute

SITE NAME: Nona Townhomes
ADDRESS: 1820, 1860 Puffin Road
Saint Cloud, FL 34771
CLIENT: SCS Engineers

N

Nona Townhomes
1820, 1860 Puffin Road
Saint Cloud, FL 34771

Inquiry Number: 7564488.3
February 08, 2024

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

02/08/24

Site Name:

Nona Townhomes
1820, 1860 Puffin Road
Saint Cloud, FL 34771
EDR Inquiry # 7564488.3

Client Name:

SCS Engineers
9500 S. Dadeland Blvd Ste 610
Miami, FL 33156
Contact: Claire Fraley

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Certified Sanborn Results:

Certification # D753-47F2-A541

PO # 09224031.00

Project Nona Townhomes

UNMAPPED PROPERTY

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Sanborn® Library search results

Certification #: D753-47F2-A541

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- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

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Nona Townhomes
1820, 1860 Puffin Road
Saint Cloud, FL 34771

Inquiry Number: 7564488.5
February 13, 2024

The EDR-City Directory Image Report

Environmental Data Resources Inc
6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available business directory data at approximately five year intervals.

RECORD SOURCES

The EDR City Directory Report accesses a variety of business directory sources, including Haines, InfoUSA, Polk, Cole, Bresser, and Stewart. Listings marked as EDR Digital Archive access Cole and InfoUSA records. The various directory sources enhance and complement each other to provide a more thorough and accurate report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	*Target Street*	*Cross Street*	*Source*
2020	☑	☑	EDR Digital Archive
2017	☑	☐	Cole Information
2014	☑	☑	Cole Information
2010	☑	☑	Cole Information
2005	☑	☑	Cole Information
2000	☑	☑	Cole Information
1995	☑	☑	Cole Information
1992	☑	☑	Cole Information
1988	☐	☐	Polk's City Directory
1983	☐	☐	Polk's City Directory
1979	☐	☐	Polk's City Directory
1975	☐	☐	Polk's City Directory
1971	☐	☐	Polk's City Directory

FINDINGS

TARGET PROPERTY STREET

1820, 1860 Puffin Road
Saint Cloud, FL 34771

Year	*CD Image*	*Source*	
PUFFIN RD			
2020	pg A2	EDR Digital Archive	
2017	pg A3	Cole Information	
2014	pg A5	Cole Information	
2010	pg A7	Cole Information	
2005	pg A9	Cole Information	
2000	pg A11	Cole Information	
1995	pg A13	Cole Information	
1992	pg A15	Cole Information	
1988	-	Polk's City Directory	Street not listed in Source
1983	-	Polk's City Directory	Street not listed in Source
1979	-	Polk's City Directory	Street not listed in Source
1975	-	Polk's City Directory	Street not listed in Source
1971	-	Polk's City Directory	Street not listed in Source

FINDINGS

CROSS STREETS

Year	*CD Image*	*Source*	
LILLIAN LEE RD			
2020	pg. A1	EDR Digital Archive	
2017	-	Cole Information	Street not listed in Source
2014	pg. A4	Cole Information	
2010	pg. A6	Cole Information	
2005	pg. A8	Cole Information	
2000	pg. A10	Cole Information	
1995	pg. A12	Cole Information	
1992	pg. A14	Cole Information	
1988	-	Polk's City Directory	Street not listed in Source
1983	-	Polk's City Directory	Street not listed in Source
1979	-	Polk's City Directory	Street not listed in Source
1975	-	Polk's City Directory	Street not listed in Source
1971	-	Polk's City Directory	Street not listed in Source

City Directory Images

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

LILLIAN LEE RD 2020

5005 LOUISE HAWKESWORTH LEE
ORIE LEE

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

PUFFIN RD 2020

1775	WAYNE LEE
1820	CHRISTINE MALUKIEWICZ
1825	ANDREW CAMPBELL
	DEBORAH CAMPBELL
	DNA FLOOR SURGEONS INC
	LAURIE LOCICERO
1850	DAVID FINLEY
1860	JENNIFER ROGERS
	RHONDA DAVIDSON

Target Street	Cross Street	Source
✓	-	Cole Information

PUFFIN RD 2017

1775 LEE, WAYNE D
1820 MALUKIEWICZ, WALTER R
1825 CAMPBELL, ANDREW L
D N A FLOOR SURGEONS INC

Target Street	Cross Street	Source
-	✓	Cole Information

LILLIAN LEE RD 2014

5101 LEE ORIE JR

Target Street	Cross Street	Source
✓	-	Cole Information

PUFFIN RD 2014

1775 LEE, WAYNE D
1820 MALUKIEWICZ, WALTER R
1825 CAMPBELL, ANDREW L
D N A FLOOR SURGEONS INC
1850 FINLEY, DAVID E

Target Street	Cross Street	Source
-	✓	Cole Information

LILLIAN LEE RD 2010

5005 LEE, ORIE N
5101 LEE ORIE

Target Street	Cross Street	Source
✓	-	Cole Information

PUFFIN RD 2010

1775	LEE, WAYNE D
1820	MALUKIEWICZ, WALTER R
1825	CAMPBELL, ANDREW L
1850	OCCUPANT UNKNOWN,
1860	OCONNOR, JOSEPH

Target Street	Cross Street	Source
-	✓	Cole Information

LILLIAN LEE RD 2005

5005 LEE, ORIE N

Target Street	Cross Street	Source
✓	-	Cole Information

PUFFIN RD 2005

1775 LEE, WAYNE D
1820 LAMB, RONNIE E
1825 CAMPBELL, ANDREW L
DNA FLOOR SURGEONS INC
1850 JOHNSON, MICHAEL S
1860 NEHMER, RAYMOND

Target Street	Cross Street	Source
-	✓	Cole Information

LILLIAN LEE RD 2000

5005 LEE, ORIE
5101 LEE, ORIE
ORIE LEE JR

Target Street	Cross Street	Source
✓	-	Cole Information

PUFFIN RD 2000

1775	LEE, WAYNE D
1820	OCCUPANT UNKNOWN,
1825	OCCUPANT UNKNOWN,
1850	OCCUPANT UNKNOWN,
1860	DAVIDSON, RHONDA

Target Street	Cross Street	Source
-	✓	Cole Information

LILLIAN LEE RD 1995

5005 LEE, ORIE JR

Target Street	Cross Street	Source
✓	-	Cole Information

PUFFIN RD 1995

1630	VEST, O
1775	LEE, WAYNE D
1820	DIEZ, MARIA R
1850	JOHNSON, MICHAEL S

Target Street	Cross Street	Source
-	✓	Cole Information

LILLIAN LEE RD 1992

5005 LEE ORIE JR
LEE, ORIE JR

Target Street	Cross Street	Source
✓	-	Cole Information

PUFFIN RD 1992

1630 VEST, O

Appendix E

EDR Database Report Information

Nona Townhomes
1820, 1860 Puffin Road
Saint Cloud, FL 34771

Inquiry Number: 7564488.2s
February 08, 2024

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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GEOCHECK ADDENDUM

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Thank you for your business.
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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527 - 21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E2247 - 16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E1528 - 22) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1820, 1860 PUFFIN ROAD
SAINT CLOUD, FL 34771

COORDINATES

Latitude (North):	28.2511850 - 28° 15' 4.26''
Longitude (West):	81.2366970 - 81° 14' 12.10''
Universal Tranverse Mercator:	Zone 17
UTM X (Meters):	476781.1
UTM Y (Meters):	3124877.8
Elevation:	74 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	17090156 NARCOOSSEE, FL
Version Date:	2021
Southeast Map:	20024088 ASHTON, FL
Version Date:	2021
Southwest Map:	17175863 SAINT CLOUD SOUTH, FL
Version Date:	2021
Northwest Map:	20024106 SAINT CLOUD NORTH, FL
Version Date:	2021

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20191130
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
1820, 1860 PUFFIN ROAD
SAINT CLOUD, FL 34771

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	ORIE LEE CO	5005 LILLIAN LEE RD	UST, AST, Financial Assurance	Lower	266, 0.050, NNW
A2	ORIE LEE CO	5005 LILLIAN LEE RD	UST FINDER	Lower	266, 0.050, NNW
3		650 NORTH TYSON OAD	DEDB	Higher	1147, 0.217, ESE
B4	CROTTY'S UNLIMITED I	SR 15 & 10TH ST	UST FINDER RELEASE	Higher	2031, 0.385, WSW
B5	CROTTY'S UNLIMITED I	SR 15 & 10TH ST	LUST, TANKS, DWM CONTAM	Higher	2031, 0.385, WSW
6	HENSEL FARMS PROPERT	1650 SOUTH NARCOOSSE	RESP PARTY	Lower	2048, 0.388, NW
C7	CAVES AUTO SALES	4905 E IRLO BRONSON	UST FINDER, UST FINDER RELEASE	Higher	2157, 0.409, SW
C8	CAVES AUTO SALES	4905 E IRLO BRONSON	LUST, UST, ASBESTOS, DWM CONTAM	Higher	2157, 0.409, SW
D9	HENSEL FARMS PROPERT	1650 SOUTH NACRCOOSE	INST CONTROL, ERIC WASTE CLEANUP	Lower	2347, 0.445, NW
C10	7-ELEVEN FOOD STORE	4910 E IRLO BRONSON	LUST, CLEANUP SITES, DWM CONTAM	Higher	2396, 0.454, SW
11	THE PANTRY #1030 (DB	4899 E IRLO BRONSON	LUST, UST, DWM CONTAM, Financial Assurance	Higher	2459, 0.466, SW
D12	TURTLE CREEK SUBDIVI	APPLE BLOSSOM LN	RESP PARTY	Lower	2602, 0.493, NW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL ---------- National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS ---------- Corrective Action Report

Lists of Federal RCRA TSD facilities

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Lists of Federal RCRA generators

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-SQG ---------- RCRA - Small Quantity Generators
RCRA-VSQG ---------- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System

US ENG CONTROLS Engineering Controls Sites List
US INST CONTROLS Institutional Controls Sites List

Federal ERNS list

ERNS Emergency Response Notification System

Lists of state- and tribal hazardous waste facilities

SHWS Florida's State-Funded Action Sites

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF Solid Waste Facility Database

Lists of state and tribal leaking storage tanks

LAST Leaking Aboveground Storage Tank Listing
INDIAN LUST Leaking Underground Storage Tanks on Indian Land

Lists of state and tribal registered storage tanks

FF TANKS Federal Facilities Listing
FEMA UST Underground Storage Tank Listing
INDIAN UST Underground Storage Tanks on Indian Land
TANKS Storage Tank Facility List

State and tribal institutional control / engineering control registries

ENG CONTROLS Institutional Controls Registry

Lists of state and tribal voluntary cleanup sites

INDIAN VCP Voluntary Cleanup Priority Listing
VCP Voluntary Cleanup Sites

Lists of state and tribal brownfield sites

BROWNFIELDS Brownfields Sites Database

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY Recycling Centers
INDIAN ODI Report on the Status of Open Dumps on Indian Lands
ODI Open Dump Inventory
DEBRIS REGION 9 Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL Delisted National Clandestine Laboratory Register

PRIORITYCLEANERS Priority Ranking List
Fl Sites Sites List
US CDL National Clandestine Laboratory Register

Local Land Records

LIENS 2 CERCLA Lien Information

Records of Emergency Release Reports

HMIRS Hazardous Materials Information Reporting System
SPILLS Oil and Hazardous Materials Incidents
SPILLS 90 SPILLS 90 data from FirstSearch
SPILLS 80 SPILLS 80 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR RCRA - Non Generators / No Longer Regulated
FUDS Formerly Used Defense Sites
DOD Department of Defense Sites
SCRD DRYCLEANERS State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR Financial Assurance Information
EPA WATCH LIST EPA WATCH LIST
2020 COR ACTION 2020 Corrective Action Program List
TSCA Toxic Substances Control Act
TRIS Toxic Chemical Release Inventory System
SSTS Section 7 Tracking Systems
ROD Records Of Decision
RMP Risk Management Plans
RAATS RCRA Administrative Action Tracking System
PRP Potentially Responsible Parties
PADS PCB Activity Database System
ICIS Integrated Compliance Information System
FTTS FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS Material Licensing Tracking System
COAL ASH DOE Steam-Electric Plant Operation Data
COAL ASH EPA Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER PCB Transformer Registration Database
RADINFO Radiation Information Database
HIST FTTS FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS Incident and Accident Data
CONSENT Superfund (CERCLA) Consent Decrees
INDIAN RESERV Indian Reservations
FUSRAP Formerly Utilized Sites Remedial Action Program
UMTRA Uranium Mill Tailings Sites
LEAD SMELTERS Lead Smelter Sites
US AIRS Aerometric Information Retrieval System Facility Subsystem
US MINES Mines Master Index File
MINES MRDS Mineral Resources Data System
ABANDONED MINES Abandoned Mines
FINDS Facility Index System/Facility Registry System
UXO Unexploded Ordnance Sites
DOCKET HWC Hazardous Waste Compliance Docket Listing
ECHO Enforcement & Compliance History Information

FUELS PROGRAM	EPA Fuels Program Registered Listing
PFAS NPL	Superfund Sites with PFAS Detections Information
PFAS FEDERAL SITES	Federal Sites PFAS Information
PFAS TSCA	PFAS Manufacture and Imports Information
PFAS TRIS	List of PFAS Added to the TRI
PFAS RCRA MANIFEST	PFAS Transfers Identified In the RCRA Database Listing
PFAS ATSDR	PFAS Contamination Site Location Listing
PFAS WQP	Ambient Environmental Sampling for PFAS
PFAS NPDES	Clean Water Act Discharge Monitoring Information
PFAS ECHO	Facilities in Industries that May Be Handling PFAS Listing
PFAS ECHO FIRE TRAINING	Facilities in Industries that May Be Handling PFAS Listing
PFAS PART 139 AIRPORT	All Certified Part 139 Airports PFAS Information Listing
AQUEOUS FOAM NRC	Aqueous Foam Related Incidents Listing
BIOSOLIDS	ICIS-NPDES Biosolids Facility Data
PFAS	PFOS and PFOA stand for perfluorooctane sulfonate and perfluorooctanoic acid
AQUEOUS FOAM	Former Fire Training Facility Assessments Listing
AIRS	Permitted Facilities Listing
ASBESTOS	ASBESTOS
CLEANUP SITES	DEP Cleanup Sites - Contamination Locator Map Listing
DRYCLEANERS	Drycleaning Facilities
Financial Assurance	Financial Assurance Information Listing
FL Cattle Dip. Vats	Cattle Dipping Vats
HAZ WASTE	Hazardous Waste Information Listing
HW GEN	Hazardous Waste Generators
SOLCP	State-Owned Lands Cleanup Program Listing
SITE INV SITES	Site Investigation Section Sites Listing
TIER 2	Tier 2 Facility Listing
UIC	Underground Injection Wells Database Listing
NPDES	Wastewater Facility Regulation Database
ERIC WASTE CLEANUP	Environmental Restoration Integrated Cleanup Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto	EDR Exclusive Historical Auto Stations
EDR Hist Cleaner	EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS	Recovered Government Archive State Hazardous Waste Facilities List
RGA LF	Recovered Government Archive Solid Waste Facilities List
RGA LUST	Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

Lists of state and tribal leaking storage tanks

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environmental Protection's PCTO1--Petroleum Contamination Detail Report.

A review of the LUST list, as provided by EDR, and dated 10/23/2023 has revealed that there are 4 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CROTTY'S UNLIMITED I	***SR 15 & 10TH ST***	***WSW 1/4 - 1/2 (0.385 mi.)***	***B5***	***15***
Facility Status: CLOSED Facility-Site Id: 9807042 Discharge Cleanup Status: NREQ - CLEANUP NOT REQUIRED				
CAVES AUTO SALES	***4905 E IRLO BRONSON***	***SW 1/4 - 1/2 (0.409 mi.)***	***C8***	***21***
Facility Status: CLOSED Facility-Site Id: 9200780 Discharge Cleanup Status: SRCR - SRCR COMPLETE				
7-ELEVEN FOOD STORE	***4910 E IRLO BRONSON***	***SW 1/4 - 1/2 (0.454 mi.)***	***C10***	***32***
Facility Status: OPEN Facility-Site Id: 9800846 Discharge Cleanup Status: RA - RA ONGOING				
THE PANTRY #1030 (DB	***4899 E IRLO BRONSON***	***SW 1/4 - 1/2 (0.466 mi.)***	***11***	***36***
Facility Status: CLOSED Facility-Site Id: 8731906 Discharge Cleanup Status: SRCR - SRCR COMPLETE				

Lists of state and tribal registered storage tanks

UST: The Underground Storage Tank database contains registered USTs. Shortly after the September 11 event, the DEP was instructed to remove the detail about some of the storage tank facilities in the state from their reports. Federal-owned facilities and bulk storage facilities are included in that set.

A review of the UST list, as provided by EDR, has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ORIE LEE CO	***5005 LILLIAN LEE RD***	***NNW 0 - 1/8 (0.050 mi.)***	***A1***	***8***
Database: UST, Date of Government Version: 11/09/2023 Tank Status: B-Removed from Site Facility-Site Id: 8627054 Facility Status: CLOSED				

AST: Shortly after the Sept 11 event, the DEP was instructed to remove the detail about some of the storage tank facilities in the state from their reports. Federal-owned facilities and bulk storage facilities are included in that set.

A review of the AST list, as provided by EDR, has revealed that there is 1 AST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ORIE LEE CO	***5005 LILLIAN LEE RD***	***NNW 0 - 1/8 (0.050 mi.)***	***A1***	***8***
Database: AST, Date of Government Version: 11/09/2023				
Facility-Site Id: 8627054				
Facility Status: CLOSED				
Facility Status: CLOSED				

State and tribal institutional control / engineering control registries

INST CONTROL: The registry is a database of all contaminated sites in the state of Florida which are subject to institutional and engineering controls.

A review of the INST CONTROL list, as provided by EDR, and dated 08/11/2023 has revealed that there is 1 INST CONTROL site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
HENSEL FARMS PROPERT	***1650 SOUTH NACRCOOSE***	***NW 1/4 - 1/2 (0.445 mi.)***	***D9***	***29***
Facility-Site Id: COM_327866				
Facility-Site Id: ERIC_7135				

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

DEDB: Ethylene dibromide (EDB), a soil fumigant, that has been detected in drinking water wells. The amount found exceeds the maximum contaminant level as stated in Chapter 62-550 or 520. It is a potential threat to public health when present in drinking water.

A review of the DEDB list, as provided by EDR, and dated 06/13/2023 has revealed that there is 1 DEDB site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	650 NORTH TYSON OAD	ESE 1/8 - 1/4 (0.217 mi.)	3	13
Well Id: 490004101				

DWM CONTAM: A listing of active or known sites. The listing includes sites that need cleanup but are not actively being working on because the agency currently does not have funding (primarily petroleum and drycleaning).

A review of the DWM CONTAM list, as provided by EDR, and dated 07/14/2023 has revealed that there are 4 DWM CONTAM sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CROTTY'S UNLIMITED I Program Site Id: 9807042	***SR 15 & 10TH ST***	***WSW 1/4 - 1/2 (0.385 mi.)***	***B5***	***15***
CAVES AUTO SALES Program Site Id: 9200780	***4905 E IRLO BRONSON***	***SW 1/4 - 1/2 (0.409 mi.)***	***C8***	***21***
7-ELEVEN FOOD STORE Program Site Id: 9800846	***4910 E IRLO BRONSON***	***SW 1/4 - 1/2 (0.454 mi.)***	***C10***	***32***
THE PANTRY #1030 (DB Program Site Id: 8731906	***4899 E IRLO BRONSON***	***SW 1/4 - 1/2 (0.466 mi.)***	***11***	***36***

RESP PARTY: Open, inactive and closed responsible party sites

A review of the RESP PARTY list, as provided by EDR, and dated 08/11/2023 has revealed that there are 2 RESP PARTY sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
HENSEL FARMS PROPERT Site Status: CLOSED	1650 SOUTH NARCOOSSE	NW 1/4 - 1/2 (0.388 mi.)	6	18
TURTLE CREEK SUBDIVI Site Status: CLOSED	APPLE BLOSSOM LN	NW 1/4 - 1/2 (0.493 mi.)	D12	46

UST FINDER: EPA developed UST Finder, a web map application containing a comprehensive, state-sourced national map of underground storage tank (UST) and leaking UST (LUST) data. It provides the attributes and locations of active and closed USTs, UST facilities, and LUST sites from states and from Tribal lands and US territories . UST Finder contains information about proximity of UST facilities and LUST sites to: surface and groundwater public drinking water protection areas; estimated number of private domestic wells and number of people living nearby; and flooding and wildfires.

A review of the UST FINDER list, as provided by EDR, and dated 06/08/2023 has revealed that there is 1 UST FINDER site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ORIE LEE CO	5005 LILLIAN LEE RD	NNW 0 - 1/8 (0.050 mi.)	A2	12

UST FINDER RELEASE: US EPA's UST Finder data is a national composite of leaking underground storage tanks. This data contains information about, and locations of, leaking underground storage tanks. Data was collected from state sources and standardized into a national profile by EPA's Office of Underground Storage Tanks, Office of Research and Development, and the Association of State and Territorial Solid Waste Management Officials.

A review of the UST FINDER RELEASE list, as provided by EDR, and dated 06/08/2023 has revealed that

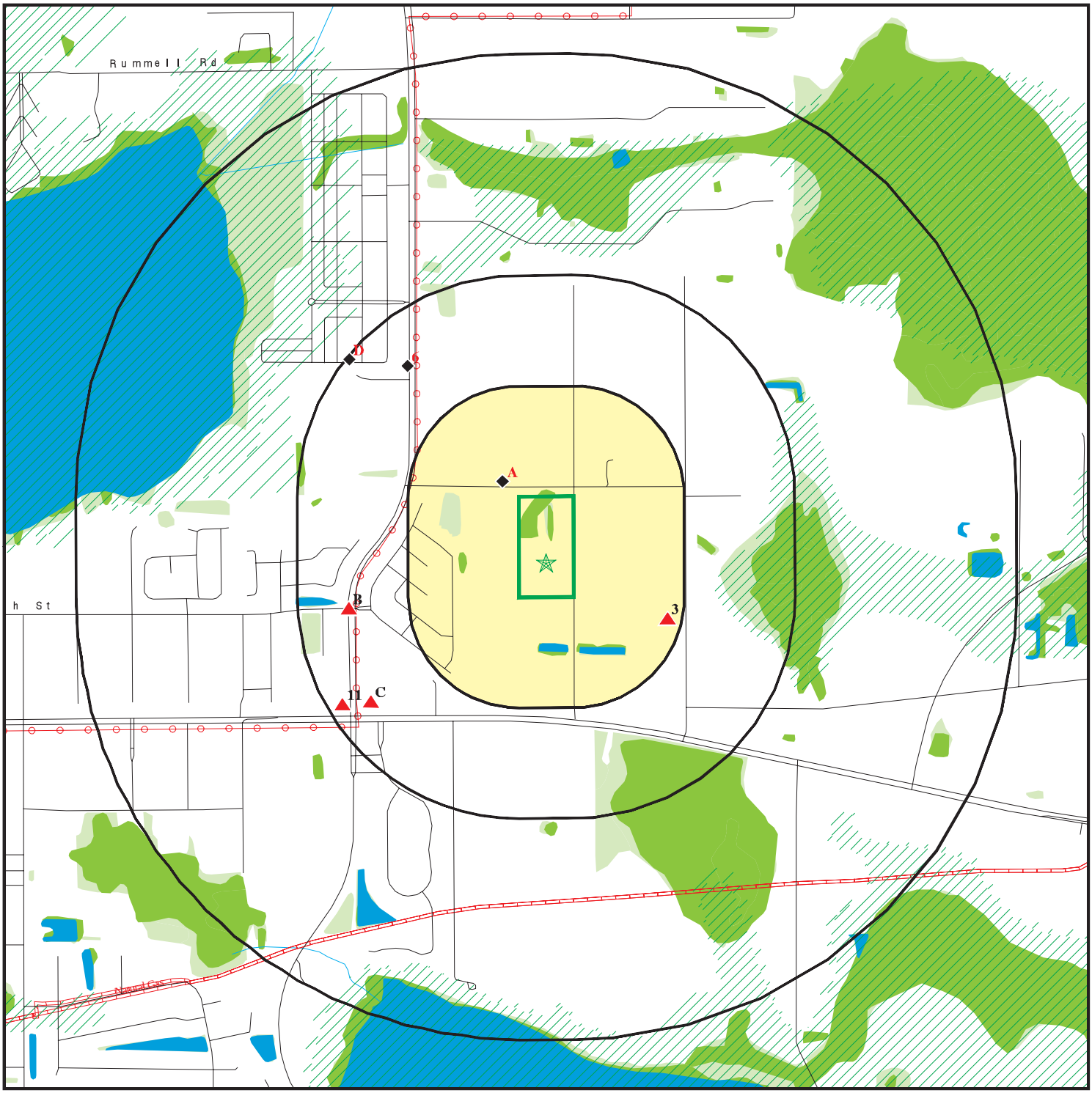
there are 2 UST FINDER RELEASE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CROTTY'S UNLIMITED I	SR 15 & 10TH ST	WSW 1/4 - 1/2 (0.385 mi.)	B4	14
CAVES AUTO SALES	***4905 E IRLO BRONSON***	***SW 1/4 - 1/2 (0.409 mi.)***	***C7***	***19***

EXECUTIVE SUMMARY

There were no unmapped sites in this report.

OVERVIEW MAP - 7564488.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

Power transmission lines

Pipelines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

FL Brownfield

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Nona Townhomes	CLIENT: SCS Engineers
ADDRESS: 1820, 1860 Puffin Road Saint Cloud FL 34771	CONTACT: Claire Fraley INQUIRY #: 7564488.2s
LAT/LONG: 28.251185 / 81.236697	DATE: February 08, 2024 7:50 pm

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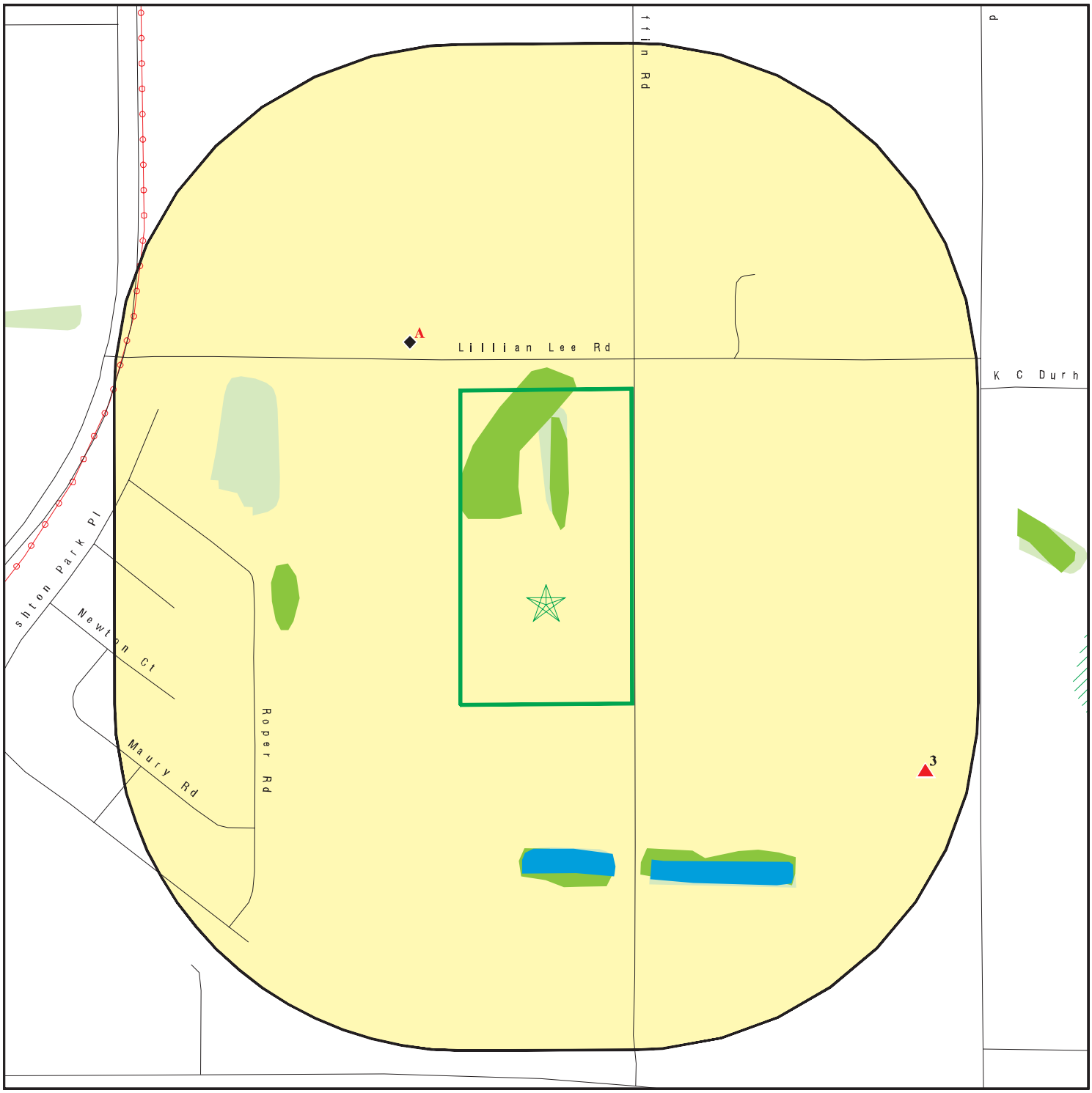
DETAIL MAP - 7564488.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites

0 1/16 1/8 1/4 Miles

- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- FL Brownfield

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Nona Townhomes	CLIENT: SCS Engineers
ADDRESS: 1820, 1860 Puffin Road Saint Cloud FL 34771	CONTACT: Claire Fraley INQUIRY #: 7564488.2s
LAT/LONG: 28.251185 / 81.236697	DATE: February 08, 2024 7:50 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
Lists of state- and tribal hazardous waste facilities								
SHWS	1.000		0	0	0	0	NR	0
Lists of state and tribal landfills and solid waste disposal facilities								
SWF/LF	0.500		0	0	0	NR	NR	0
Lists of state and tribal leaking storage tanks								
LAST	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LUST	0.500		0	0	4	NR	NR	4
INDIAN LUST	0.500		0	0	0	NR	NR	0
Lists of state and tribal registered storage tanks								
FF TANKS	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		1	0	NR	NR	NR	1
AST	0.250		1	0	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
TANKS	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	1	NR	NR	1
Lists of state and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
PRIORITYCLEANERS	0.500		0	0	0	NR	NR	0
Fl Sites	1.000		0	0	0	0	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SPILLS 80	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
MINES MRDS	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
PFAS NPL	0.250		0	0	NR	NR	NR	0
PFAS FEDERAL SITES	0.250		0	0	NR	NR	NR	0
PFAS TSCA	0.250		0	0	NR	NR	NR	0
PFAS TRIS	0.250		0	0	NR	NR	NR	0
PFAS RCRA MANIFEST	0.250		0	0	NR	NR	NR	0
PFAS ATSDR	0.250		0	0	NR	NR	NR	0
PFAS WQP	0.250		0	0	NR	NR	NR	0
PFAS NPDES	0.250		0	0	NR	NR	NR	0
PFAS ECHO	0.250		0	0	NR	NR	NR	0
PFAS ECHO FIRE TRAINING	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
PFAS PART 139 AIRPORT	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM NRC	0.250		0	0	NR	NR	NR	0
BIOSOLIDS	TP		NR	NR	NR	NR	NR	0
PFAS	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
ASBESTOS	TP		NR	NR	NR	NR	NR	0
CLEANUP SITES	TP		NR	NR	NR	NR	NR	0
DEDB	0.250		0	1	NR	NR	NR	1
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
DWM CONTAM	0.500		0	0	4	NR	NR	4
Financial Assurance	TP		NR	NR	NR	NR	NR	0
FL Cattle Dip. Vats	0.250		0	0	NR	NR	NR	0
HAZ WASTE	0.250		0	0	NR	NR	NR	0
HW GEN	0.250		0	0	NR	NR	NR	0
RESP PARTY	0.500		0	0	2	NR	NR	2
SOLCP	TP		NR	NR	NR	NR	NR	0
SITE INV SITES	0.500		0	0	0	NR	NR	0
TIER 2	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
UST FINDER	0.250		1	0	NR	NR	NR	1
ERIC WASTE CLEANUP	TP		NR	NR	NR	NR	NR	0
UST FINDER RELEASE	0.500		0	0	2	NR	NR	2
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA HWS	TP		NR	NR	NR	NR	NR	0
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		0	3	1	13	0	0	17

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **ORIE LEE CO** **UST** **U001365692**
NNW **5005 LILLIAN LEE RD** **AST** **N/A**
< 1/8 **SAINT CLOUD, FL 34771** **Financial Assurance**
0.050 mi.
266 ft. **Site 1 of 2 in cluster A**

Relative:
Lower

Actual:
70 ft.

UST:

Facility ID:	8627054
Name:	ORIE LEE CO
Address:	5005 LILLIAN LEE RD
City,State,Zip:	SAINT CLOUD, FL 34771
Facility Phone:	7724730142
Facility Status:	CLOSED
Facility Type:	C
Type Description:	Fuel user/Non-retail
Depco:	P
Region:	STATE
Positioning Method:	AGPS
Latitude/Longitude:	28 15 17 / 81 14 5

UST:

Tank ID:	2
Tank Capacity:	4000
Tank Location:	UNDERGROUND
Tank Status:	B-Removed from Site
Status Date:	12/31/1991
Install Date:	Not reported
Substance:	B
Content Description:	Unleaded Gas
Vessel Indicator:	TANK
DEP Contractor:	P

Owner:

Owner ID:	12744
Owner Name:	ORIE LEE DBA LEE GROVES
Owner Address:	5101 LILLIAN LEE RD
Owner Address 2:	Not reported
Owner City,State,Zip:	SAINT CLOUD, FL 34771
Owner Contact:	ORIE LEE
Owner Phone:	4078922078

Tank ID:	1
Tank Capacity:	1000
Tank Location:	UNDERGROUND
Tank Status:	B-Removed from Site
Status Date:	12/31/1991
Install Date:	11/1/1981
Substance:	A
Content Description:	Leaded Gas
Vessel Indicator:	TANK
DEP Contractor:	P

Owner:

Owner ID:	12744
Owner Name:	ORIE LEE DBA LEE GROVES
Owner Address:	5101 LILLIAN LEE RD
Owner Address 2:	Not reported
Owner City,State,Zip:	SAINT CLOUD, FL 34771
Owner Contact:	ORIE LEE
Owner Phone:	4078922078

ORIE LEE CO (Continued) **U001365692**

AST:

Facility ID:	8627054
Name:	ORIE LEE CO
Address:	5005 LILLIAN LEE RD
City,State,Zip:	SAINT CLOUD, FL 34771
Facility Phone:	7724730142
Facility Status:	CLOSED
Facility Type:	C
Type Description:	Fuel user/Non-retail
Depco:	P
Region:	STATE
Positioning Method:	AGPS
Latitude/Longitude:	28 15 17 / 81 14 5

Tank:

Tank ID:	5
Tank Capacity:	4000
Tank Location:	ABOVEGROUND
Tank Status:	B-Removed from Site
Status Date:	12/31/1991
Install Date:	7/1/1975
Substance:	D
Content Description:	Vehicular Diesel
Vessel Indicator:	TANK
DEP Contractor:	P

Owner:

Owner ID:	12744
Owner Name:	ORIE LEE DBA LEE GROVES
Owner Address:	5101 LILLIAN LEE RD
Owner Address 2:	Not reported
Owner City,State,Zip:	SAINT CLOUD, FL 34771
Owner Contact:	ORIE LEE
Owner Phone:	4078922078

Tank ID:	3
Tank Capacity:	8000
Tank Location:	ABOVEGROUND
Tank Status:	B-Removed from Site
Status Date:	04/24/2000
Install Date:	7/1/1975
Substance:	D
Content Description:	Vehicular Diesel
Vessel Indicator:	TANK
DEP Contractor:	P

Owner:

Owner ID:	12744
Owner Name:	ORIE LEE DBA LEE GROVES
Owner Address:	5101 LILLIAN LEE RD
Owner Address 2:	Not reported
Owner City,State,Zip:	SAINT CLOUD, FL 34771
Owner Contact:	ORIE LEE
Owner Phone:	4078922078

Tank ID:	4

ORIE LEE CO (Continued) **U001365692**

Tank Capacity: 6000
Tank Location: ABOVEGROUND
Tank Status: B-Removed from Site
Status Date: 04/24/2000
Install Date: 7/1/1975
Substance: B
Content Description: Unleaded Gas
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 12744
Owner Name: ORIE LEE DBA LEE GROVES
Owner Address: 5101 LILLIAN LEE RD
Owner Address 2: Not reported
Owner City,State,Zip: SAINT CLOUD, FL 34771
Owner Contact: ORIE LEE
Owner Phone: 4078922078

Tank ID: 6
Tank Capacity: 9000
Tank Location: ABOVEGROUND
Tank Status: B-Removed from Site
Status Date: 07/01/2013
Install Date: 4/1/2000
Substance: D
Content Description: Vehicular Diesel
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 12744
Owner Name: ORIE LEE DBA LEE GROVES
Owner Address: 5101 LILLIAN LEE RD
Owner Address 2: Not reported
Owner City,State,Zip: SAINT CLOUD, FL 34771
Owner Contact: ORIE LEE
Owner Phone: 4078922078

FL Financial Assurance 3:
Name: ORIE LEE CO
Address: 5005 LILLIAN LEE RD
City,State,Zip: SAINT CLOUD, FL 34771
Region: 3
Facility ID: 8627054
Facility Phone: 7724730142
Facility Status: CLOSED
Facility Type: C
Type Description: Fuel user/Non-retail
DEP CO: P
Finaincial Responsibility: INSURANCE
Insurance Company: COMMERCE & INDUSTRY
Effective Date: 08/25/2008
Expire Date: 08/25/2009
Owner ID: 12744

ORIE LEE CO (Continued) **U001365692**

Onwer Name:	ORIE LEE DBA LEE GROVES
Owner Address:	5101 LILLIAN LEE RD
Owner Address2:	Not reported
Owner City,St,Zip:	SAINT CLOUD, FL 34771
Contact:	ORIE LEE
Resp Party Phone:	4078922078

Name:	ORIE LEE CO
Address:	5005 LILLIAN LEE RD
City,State,Zip:	SAINT CLOUD, FL 34771
Region:	3
Facility ID:	8627054
Facility Phone:	7724730142
Facility Status:	CLOSED
Facility Type:	C
Type Description:	Fuel user/Non-retail
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	08/25/2010
Expire Date:	08/25/2011
Owner ID:	12744
Onwer Name:	ORIE LEE DBA LEE GROVES
Owner Address:	5101 LILLIAN LEE RD
Owner Address2:	Not reported
Owner City,St,Zip:	SAINT CLOUD, FL 34771
Contact:	ORIE LEE
Resp Party Phone:	4078922078

Name:	ORIE LEE CO
Address:	5005 LILLIAN LEE RD
City,State,Zip:	SAINT CLOUD, FL 34771
Region:	3
Facility ID:	8627054
Facility Phone:	7724730142
Facility Status:	CLOSED
Facility Type:	C
Type Description:	Fuel user/Non-retail
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	08/25/2011
Expire Date:	08/25/2012
Owner ID:	12744
Onwer Name:	ORIE LEE DBA LEE GROVES
Owner Address:	5101 LILLIAN LEE RD
Owner Address2:	Not reported
Owner City,St,Zip:	SAINT CLOUD, FL 34771
Contact:	ORIE LEE
Resp Party Phone:	4078922078

A2
NNW
< 1/8
0.050 mi.
266 ft.

ORIE LEE CO
5005 LILLIAN LEE RD
SAINT CLOUD, FL 34771

Site 2 of 2 in cluster A

UST FINDER **1028233037**
N/A

Relative:
Lower

Actual:
70 ft.

UST FINDER:

Object ID:	66275
Facility ID:	FL8627054
Name:	ORIE LEE CO
Address:	5005 LILLIAN LEE RD
City,State,Zip:	SAINT CLOUD, FL 34771
Address Match Type:	Not reported
Open USTs:	0
Closed USTs:	2
TOS USTs:	0
Population 1500ft:	18
Private Wells 1500ft:	6
Within 100yr Floodplain:	No
Land Use:	Non-Developed
Within SPA:	No
SPA PWS Facility ID:	Not reported
SPA Water Type:	Not reported
SPA Facility Type:	Not reported
SPA HUC12:	Not reported
Within WHPA:	Yes
WHPA PWS Facility ID:	FL3491373_72287079
WHPA Water Type:	GW - Ground water
WHPA Facility Type:	WL - Well
WHPA HUC12:	030901010104
Facility Status:	Closed UST(s)
Date of Last Inspection:	Not reported
EPA Region:	4
Tribe:	Not reported
Coordinate Source:	State
X Coord:	-81.23472222
Y Coord:	28.2547222200001
Latitude:	28.25472222
Longitude:	-81.23472222

UST FINDER:

Object ID:	242946
Facility ID:	FL8627054
Tank ID:	FL8627054-1
Tank Status:	Closed
Installation Date:	1981/11/01 16:00:00+00
Removal Date:	Not reported
Tank Capacity:	1000
Substances:	Leaded Gas
Tank Wall Type:	Not reported

Object ID:	308602
Facility ID:	FL8627054
Tank ID:	FL8627054-2
Tank Status:	Closed
Installation Date:	Not reported
Removal Date:	Not reported
Tank Capacity:	4000
Substances:	Unleaded Gas
Tank Wall Type:	Not reported

3
ESE
1/8-1/4
0.217 mi.
1147 ft.

650 NORTH TYSON OAD
ST. CLOUD, FL

DEDB **S108818929**
N/A

Relative:
Higher

Actual:
75 ft.

DEDB:

Name:	Not reported
Address:	650 NORTH TYSON OAD
City,State,Zip:	ST. CLOUD, FL
Well Id:	490004101
Location Method:	MMAP
Florida Id:	Not reported
Latitude:	28.249422
Longitude:	-81.2322
Well Depth:	0
Case depth:	0
Diameter:	0
Well Type:	Private well
Long DD:	81
Long MM:	13
Long SS:	56.14
Lat DD:	28
Lat MM:	14
Lat SS:	57.921
Permit No:	Not reported
Directions:	Not reported
Comments:	Not reported
Status:	Not reported
Recheck:	Not reported
Reimbursement:	Not reported
Tagged:	Not reported
Exchange:	Not reported
Alb X:	671017.08
Alb Y:	474537.17
Username:	Not reported
Time Stamp:	Not reported
Datum:	Not reported
Scale:	0
Accuracy:	0
QA Method:	NOT REVIEWED
Created:	Not reported
Filter status:	Not reported
Resample:	Not reported
Oculus:	Not reported
Sample ID:	2433503
Sample Date:	10/30/1984
Analysis:	EDB
Discharge:	0
Chemical:	ETHYLENE DIBROMIDE (EDB)
Value:	0
Res Qual:	O
Units:	ug/L
CAS Number:	106-93-4
Facility Zip Ext:	Not reported
Method:	0
Sample Type:	Not reported
FLUWID:	Not reported
Resident Last Name:	Not reported

(Continued) **S108818929**

Job Name: Not reported
Customer ID: Not reported

B4 **CROTTY'S UNLIMITED INC 03-1I-3122** **UST FINDER RELEASE** **1028961430**
WSW **SR 15 & 10TH ST** **N/A**
1/4-1/2 **SAINT CLOUD, FL 0**
0.385 mi.
2031 ft. **Site 1 of 2 in cluster B**

Relative: **Higher**

Actual: **75 ft.**

UST FINDER RELEASE:

Object ID:	116465
Facility ID:	FL9807042
Lust ID:	FL5631
Name:	CROTTY'S UNLIMITED INC 03-1I-3122
Address:	SR 15 & 10TH ST
City,State,Zip:	SAINT CLOUD, FL 0
Address Match Type:	StreetInt
Reported Date:	2003/07/25 15:59:59+00
Status:	No Further Action
Substance:	Not reported
Population within 1500ft:	318
Domestic Wells within 1500ft:	43
Land Use:	Developed, Low Intensity
Within SPA:	No
SPA PWS Facility ID:	Not reported
SPA Water Type:	Not reported
SPA Facility Type:	Not reported
SPA HUC12:	Not reported
Within WHPA:	Yes
WHPA PWS Facility ID:	FL4470257_4005735979
WHPA Water Type:	GW - Ground water
WHPA Facility Type:	WL - Well
WHPA HUC12:	030901020302
Within 100yr Floodplain:	No
Tribe:	Not reported
EPA Region:	4
NFA Letter 1:	Not reported
NFA Letter 2:	Not reported
NFA Letter 3:	Not reported
NFA Letter 4:	Not reported
Closed With Residual Contaminate:	Not reported
Coordinate Source:	Geocode
X Coord:	-80.82991
Y Coord:	27.2537100000001
Latitude:	27.25371
Longitude:	-80.8299099999999

B5 **CROTTY'S UNLIMITED INC 03-1I-3122** **LUST** **U004146766**
WSW **SR 15 & 10TH ST** **TANKS** **N/A**
1/4-1/2 **SAINT CLOUD, FL 34771** **DWM CONTAM**
0.385 mi.
2031 ft. **Site 2 of 2 in cluster B**

Relative:
Higher

Actual:
75 ft.

LUST:

Name:	CROTTY'S UNLIMITED INC 03-1I-3122
Address:	SR 15 & 10TH ST
City,State,Zip:	SAINT CLOUD, FL 34771
Region:	STATE
Facility Id:	9807042
Facility Status:	CLOSED
Facility Type:	Q - Emergency Response Spill Site
Facility Phone:	Not reported
Facility Cleanup Rank:	4215
District:	Central District
Lat/Long (dms):	28 14 46.18 / 81 14 37.8999999
Section:	5
Township:	26S
Range:	31E
Feature:	Not reported
Method:	Not reported
Datum:	Not reported
Score:	Not reported
Score Effective Date:	2005-04-23 00:00:00
Score When Ranked:	40
Operator:	Not reported
Name Update:	Not reported
Address Update:	Not reported

Discharge Cleanup Summary:

Discharge Date:	7/25/2003
PCT Discharge Combined:	Not reported
Cleanup Required:	N - NO CLEANUP REQUIRED
Discharge Cleanup Status:	NREQ - CLEANUP NOT REQUIRED
Disch Cleanup Status Date:	5/27/2009
Cleanup Work Status:	COMPLETED
Information Source:	R - EMERGENCY RESPONSE REPORT
Other Source Description:	Not reported
Eligibility Indicator:	I - INELIGIBLE
Site Manager:	FRANKLIN_C
Site Mgr End Date:	5/28/2009
Tank Office:	PCLP53 - FL DOH IN POLK COUNTY

Contaminated Media:

Discharge Date:	7/25/2003
Pct Discharge Combined With:	Not reported
Cleanup Required:	N - NO CLEANUP REQUIRED
Discharge Cleanup Status:	NREQ - CLEANUP NOT REQUIRED
Disch Cleanup Status Date:	5/27/2009
Cleanup Work Status:	COMPLETED
Information Source:	R - EMERGENCY RESPONSE REPORT
Other Source Description:	BER
Elig Indicator:	I - INELIGIBLE
Site Manager:	FRANKLIN_C
Site Mgr End Date:	5/28/2009
Tank Office:	PCLP53 - FL DOH IN POLK COUNTY
Contaminated Drinking Wells:	Not reported
Contaminated Monitoring Well:	Not reported

CROTTY'S UNLIMITED INC 03-1I-3122 (Continued) **U004146766**

Contaminated Soil:	Yes
Contaminated Surface Water:	No
Contaminated Ground Water:	No
Pollutant:	D - Vehicular Diesel
Pollutant Other Description:	SEPTIC TANK TRUCK COLLIDED W/ANOTHER VEHICLE.
Gallons Discharged:	30

Task Information:

District:	CD
Facility ID:	9807042
Facility Status:	CLOSED
Facility Type:	Q - Emergency Response Spill Site -
County:	OSCEOLA
County ID:	49
Cleanup Eligibility Status:	I
Source Effective Date:	Not reported
Discharge Date:	07-25-2003
Cleanup Required:	N - NO CLEANUP REQUIRED
Discharge Cleanup Status:	NREQ - CLEANUP NOT REQUIRED
Disch Cleanup Status Date:	05-27-2009
SRC Action Type:	-
SRC Submit Date:	Not reported
SRC Review Date:	Not reported
SRC Completion Status:	-
SRC Issue Date:	Not reported
SRC Comment:	Not reported
Cleanup Work Status:	COMPLETED
Site Mgr:	FRANKLIN_C
Site Mgr End Date:	05-28-2009
Tank Office:	PCLP53 - Polk County
SR Task ID:	Not reported
SR Cleanup Responsible:	-
SR Funding Eligibility Type:	-
SR Actual Cost:	Not reported
SR Completion Date:	Not reported
SR Payment Date:	Not reported
SR Oral Date:	Not reported
SR Written Date:	Not reported
SR Soil Removal:	Not reported
SR Free Product Removal:	Not reported
SR Soil Tonnage Removed:	Not reported
SR Soil Treatment:	Not reported
SR Other Treatment:	Not reported
SR Alternate Proc Received Date:	Not reported
SR Alternate Procedure Status:	Not reported
SR Alternate Procedure Status Date:	Not reported
SR Alternate Procedure Comments:	Not reported
SA Task ID:	Not reported
SA Cleanup Responsible:	-
SA Funding Eligibility Type:	-
SA Actual Cost:	Not reported
SA Completion Date:	Not reported
SA Payment Date:	Not reported
RAP Task ID:	Not reported
RAP Cleanup Responsible ID:	-
RAP Funding Eligibility Type:	-
RAP Actual Cost:	Not reported
RAP Completion Date:	Not reported

CROTTY'S UNLIMITED INC 03-1I-3122 (Continued) **U004146766**

RAP Payment Date:	Not reported
RAP Last Order Approved:	Not reported
RA Task ID:	Not reported
RA Cleanup Responsible:	-
RA Funding Eligibility Type:	-
RA Years to Complete:	Not reported
RA Actual Cost:	Not reported

Click here for Florida Oculus:

TANKS:

Name:	CROTTY'S UNLIMITED INC 03-1I-3122
Address:	SR 15 & 10TH ST
City,State,Zip:	SAINT CLOUD, FL 34771
Facility ID:	9807042
Facility Phone:	Not reported
Facility Status:	CLOSED
Facility Type:	Q
Type Description:	Emergency Response Spill Site
Dep Co:	P
Lat/Lon Deg Min Sec:	Not reported

DWM CONTAM:

Name:	CROTTY'S UNLIMITED INC 03-1I-3122
Address:	SR 15 & 10TH ST
City,State,Zip:	SAINT CLOUD, FL
Program Site Id:	9807042
Lat DD:	Not reported
Lat MM:	Not reported
Lat SS:	Not reported
Long DD:	Not reported
Long MM:	Not reported
Long SS:	Not reported
Office/ District:	CD
Program Area:	PETROLEUM
Priority Score:	Not reported
Datum:	Not reported
Method:	Not reported
Facility Status:	CLOSED-STCM
Facility Type:	Not reported
Score Effective Date:	Not reported
Score When Ranked:	Not reported
Rank:	Not reported
Operator:	Not reported
Phone:	Not reported
Name Changed:	Not reported
Addr Changed:	Not reported
Related Party ID:	Not reported
Primary RP Role:	Not reported
RP Begin Date:	Not reported
RP Name:	Not reported
RP Address1:	Not reported
RP Address2:	Not reported
RP City:	Not reported
RP State:	Not reported
RP Zip5:	Not reported

CROTTY'S UNLIMITED INC 03-1I-3122 (Continued) **U004146766**

RP Zip4:	Not reported
Contact:	Not reported
RP Phone:	Not reported
RP Extension:	Not reported
Site Manager:	Not reported

6
NW
1/4-1/2
0.388 mi.
2048 ft.

HENSEL FARMS PROPERTY
1650 SOUTH NARCOOSSEE ROAD
ST. CLOUD, FL 34769

RESP PARTY **S128164811**
N/A

Relative:
Lower

Actual:
69 ft.

RESP PARTY:

Name:	HENSEL FARMS PROPERTY
Address:	1650 SOUTH NARCOOSSEE ROAD
City,State,Zip:	ST. CLOUD, FL 34769
District:	Central District
Site Id:	327866
Project Id:	342954
Site Status:	CLOSED
Project Manager:	HEAVISIDE_C
OGC Case Number:	N
Initial Date Received:	10/14/2014
Contaminants:	Not reported
Offsite Cont Impact:	N
Priority Score:	Not reported
Datum:	NAD83
Method ID:	DPHO
Feature:	Not reported
Object Of Interest:	CAP_RAP SITE
Proximity To Object:	APPRX
Collect Username:	HEAVISIDE_C
Collect Affiliation:	Florida Department of Environmental Protection
Collect Program Id:	CL
Collect Date:	07/15/2014
Map Series Used:	IMAGERY_11_13
Map Source Scale:	1250
Interpolation Scale:	1250
Coordinate Accuracy Id:	3
Verify Method Id:	DPHO
Verifier Username:	HEAVISIDE_C
Verifier Affiliation:	DEPARTMENT OF ENVIRONMENTAL PROTECTION
Verifying Program Id:	CL
Verification Date:	07/15/2014
Decode for District:	Central District
Decode for Datum:	North American Datum of 1983
Decode for Method:	Digital Aerial Photography With Ground Control
Decode for Off Site COC:	No, the best available evidence (such as completed SAR) demonstrates that contamination above applicable standards or criteria DOES NOT extend offsite.
Decode for V_Method:	Digital Aerial Photography With Ground Control
Latitude/Longitude (deg/min/sec):	28 15 / 81 14
Source Facility Name:	Not reported
Source Facility ID:	Not reported
Program:	Not reported
Program Type:	Not reported
Program Status:	Not reported
WMD:	Not reported

HENSEL FARMS PROPERTY (Continued) **S128164811**

ICR Indicator:	Not reported
Discharge Date:	Not reported
GIS ALBX:	Not reported
GIS ALBY:	Not reported
Site Manager:	Not reported
Site Phase Description:	Not reported
Offsite Contamination Key:	Not reported
Documents:	Not reported
Objectid:	Not reported

C7 **CAVES AUTO SALES** **UST FINDER** **1028248065**
SW **4905 E IRLO BRONSON MEMORIAL HWY** **UST FINDER RELEASE** **N/A**
1/4-1/2 **SAINT CLOUD, FL 34771**
0.409 mi.
2157 ft. **Site 1 of 3 in cluster C**

Relative:
Higher

Actual:
76 ft.

UST FINDER:

Object ID:	79774
Facility ID:	FL9200780
Name:	CAVES AUTO SALES
Address:	4905 E IRLO BRONSON MEMORIAL HWY
City,State,Zip:	SAINT CLOUD, FL 34771
Address Match Type:	PointAddress
Open USTs:	0
Closed USTs:	5
TOS USTs:	0
Population 1500ft:	307
Private Wells 1500ft:	80
Within 100yr Floodplain:	No
Land Use:	Developed, Medium Intensity
Within SPA:	No
SPA PWS Facility ID:	Not reported
SPA Water Type:	Not reported
SPA Facility Type:	Not reported
SPA HUC12:	Not reported
Within WHPA:	Yes
WHPA PWS Facility ID:	FL3491373_72287079
WHPA Water Type:	GW - Ground water
WHPA Facility Type:	WL - Well
WHPA HUC12:	030901010104
Facility Status:	Closed UST(s)
Date of Last Inspection:	Not reported
EPA Region:	4
Tribe:	Not reported
Coordinate Source:	Geocode
X Coord:	-81.2426703799999
Y Coord:	28.246247494
Latitude:	28.2462474937963
Longitude:	-81.2426703802871

UST FINDER:

Object ID:	296876
Facility ID:	FL9200780
Tank ID:	FL9200780-1
Tank Status:	Closed
Installation Date:	Not reported
Removal Date:	Not reported
Tank Capacity:	3000

CAVES AUTO SALES (Continued) **1028248065**

Substances: Waste Oil
Tank Wall Type: Not reported

Object ID: 296877
Facility ID: FL9200780
Tank ID: FL9200780-2
Tank Status: Closed
Installation Date: Not reported
Removal Date: Not reported
Tank Capacity: 3000
Substances: Leaded Gas
Tank Wall Type: Not reported

Object ID: 296878
Facility ID: FL9200780
Tank ID: FL9200780-3
Tank Status: Closed
Installation Date: Not reported
Removal Date: Not reported
Tank Capacity: 3000
Substances: Unleaded Gas
Tank Wall Type: Not reported

Object ID: 296879
Facility ID: FL9200780
Tank ID: FL9200780-4
Tank Status: Closed
Installation Date: Not reported
Removal Date: Not reported
Tank Capacity: 3000
Substances: Vehicular Diesel
Tank Wall Type: Not reported

Object ID: 296880
Facility ID: FL9200780
Tank ID: FL9200780-5
Tank Status: Closed
Installation Date: Not reported
Removal Date: Not reported
Tank Capacity: 550
Substances: Waste Oil
Tank Wall Type: Not reported

UST FINDER RELEASE:
Object ID: 115210
Facility ID: FL9200780
Lust ID: FL18503
Name: CAVES AUTO SALES
Address: 4905 E IRLO BRONSON MEMORIAL HWY
City,State,Zip: SAINT CLOUD, FL 0
Address Match Type: PointAddress
Reported Date: 1992/02/27 15:59:59+00
Status: No Further Action
Substance: Not reported
Population within 1500ft: 309
Domestic Wells within 1500ft: 80

CAVES AUTO SALES (Continued) **1028248065**

Land Use:	Developed, Medium Intensity
Within SPA:	No
SPA PWS Facility ID:	Not reported
SPA Water Type:	Not reported
SPA Facility Type:	Not reported
SPA HUC12:	Not reported
Within WHPA:	Yes
WHPA PWS Facility ID:	FL3491373_72287079
WHPA Water Type:	GW - Ground water
WHPA Facility Type:	WL - Well
WHPA HUC12:	030901010104
Within 100yr Floodplain:	No
Tribe:	Not reported
EPA Region:	4
NFA Letter 1:	Not reported
NFA Letter 2:	Not reported
NFA Letter 3:	Not reported
NFA Letter 4:	Not reported
Closed With Residual Contaminate:	Not reported
Coordinate Source:	Geocode
X Coord:	-81.24267
Y Coord:	28.24625
Latitude:	28.24625
Longitude:	-81.24267

C8 **CAVES AUTO SALES** **LUST** **U001378835**
SW **4905 E IRLO BRONSON MEMORIAL HWY** **UST** **N/A**
1/4-1/2 **SAINT CLOUD, FL 34771** **ASBESTOS**
0.409 mi. **DWM CONTAM**
2157 ft. **Site 2 of 3 in cluster C**

Relative:
Higher

Actual:
76 ft.

LUST:

Name:	CAVES AUTO SALES
Address:	4905 E IRLO BRONSON MEMORIAL HWY
City,State,Zip:	SAINT CLOUD, FL 34771
Region:	STATE
Facility Id:	9200780
Facility Status:	CLOSED
Facility Type:	C - Fuel user/Non-retail
Facility Phone:	(407)578-9598
Facility Cleanup Rank:	3221
District:	Central District
Lat/Long (dms):	28 14 47.0799999 / 81 14 36.9099999
Section:	5
Township:	26S
Range:	31E
Feature:	Not reported
Method:	Not reported
Datum:	0
Score:	50
Score Effective Date:	1999-12-29 00:00:00
Score When Ranked:	50
Operator:	JIM COTTON
Name Update:	Not reported
Address Update:	2007-11-14 00:00:00

Petroleum Cleanup PCT Facility Score:

Facility Cleanup Status:	CMPL - COMPLETED

CAVES AUTO SALES (Continued) **U001378835**

Contact:	JIM COTTON
Contact Company:	BREIER & SEIF PA SCREP #1
Contact Address:	2800 PONCE DE LEON BLVD #1125
Contact City/State/Zip:	CORAL GABLES, FL 33134
Phone:	(305)445-0707
Bad Address Ind:	N
State:	FL
Zip:	34771
Score:	50
Score Effective Date:	1999-12-29 00:00:00
Related Party ID:	2656
Primary RP Role:	ACCOUNT OWNER
RP Begin Date:	1994-05-20
RP Zip:	6912
RP Extension:	Not reported

Discharge Cleanup Summary:

Discharge Date:	2/27/1992
PCT Discharge Combined:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SRCR - SRCR COMPLETE
Disch Cleanup Status Date:	1/9/2008
Cleanup Work Status:	COMPLETED
Information Source:	A - ABANDONED TANK RESTORATION
Other Source Description:	Not reported
Eligibility Indicator:	E - ELIGIBLE
Site Manager:	ARNOLD_DB
Site Mgr End Date:	1/24/2008
Tank Office:	PCLP53 - FL DOH IN POLK COUNTY

Petroleum Cleanup Program Eligibility:

Facility ID:	9200780
Discharge Date:	2/27/1992
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SRCR - SRCR COMPLETE
Disch Cleanup Status Date:	1/9/2008
Cleanup Work Status:	COMPLETED
Information Source:	A - ABANDONED TANK RESTORATION
Other Source Description:	Not reported
Application Received Date:	5/14/1992
Cleanup Program:	A - ABANDONED TANK RESTORATION PROGRAM
Eligibility Status:	5/18/1992
Elig Status Date:	5/18/1992
Letter Of Intent Date:	5/14/1992
Redetermined:	No
Inspection Date:	5/13/1992
Site Manager:	ARNOLD_DB
Site Mgr End Date:	1/24/2008
Tank Office:	PCLP53 - FL DOH IN POLK COUNTY
Deductible Amount:	500
Deductible Paid To Date:	500
Co-Pay Amount:	0
Co-Pay Paid To Date:	0
Cap Amount:	0

Contaminated Media:

Discharge Date:	2/27/1992

CAVES AUTO SALES (Continued) **U001378835**

Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SRCR - SRCR COMPLETE
Disch Cleanup Status Date:	1/9/2008
Cleanup Work Status:	COMPLETED
Information Source:	A - ABANDONED TANK RESTORATION
Other Source Description:	Not reported
Elig Indicator:	E - ELIGIBLE
Site Manager:	ARNOLD_DB
Site Mgr End Date:	1/24/2008
Tank Office:	PCLP53 - FL DOH IN POLK COUNTY
Contaminated Drinking Wells:	0
Contaminated Monitoring Well:	No
Contaminated Soil:	Yes
Contaminated Surface Water:	No
Contaminated Ground Water:	Yes
Pollutant:	D - Vehicular Diesel
Pollutant Other Description:	Not reported
Gallons Discharged:	Not reported
Discharge Date:	2/27/1992
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SRCR - SRCR COMPLETE
Disch Cleanup Status Date:	1/9/2008
Cleanup Work Status:	COMPLETED
Information Source:	A - ABANDONED TANK RESTORATION
Other Source Description:	Not reported
Elig Indicator:	E - ELIGIBLE
Site Manager:	ARNOLD_DB
Site Mgr End Date:	1/24/2008
Tank Office:	PCLP53 - FL DOH IN POLK COUNTY
Contaminated Drinking Wells:	0
Contaminated Monitoring Well:	No
Contaminated Soil:	Yes
Contaminated Surface Water:	No
Contaminated Ground Water:	Yes
Pollutant:	P - Generic Gasoline
Pollutant Other Description:	Not reported
Gallons Discharged:	Not reported

Task Information:

District:	CD
Facility ID:	9200780
Facility Status:	CLOSED
Facility Type:	C - Fuel user/Non-retail -
County:	OSCEOLA
County ID:	49
Cleanup Eligibility Status:	E
Source Effective Date:	11-06-2007
Discharge Date:	02-27-1992
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SRCR - SRCR COMPLETE
Disch Cleanup Status Date:	01-09-2008
SRC Action Type:	SRCR - SITE REHABILITATION COMPLETION REPORT
SRC Submit Date:	10-18-2007
SRC Review Date:	11-05-2007
SRC Completion Status:	A - APPROVED
SRC Issue Date:	01-09-2008

CAVES AUTO SALES (Continued) **U001378835**

SRC Comment:	Not reported
Cleanup Work Status:	COMPLETED
Site Mgr:	ARNOLD_DB
Site Mgr End Date:	01-24-2008
Tank Office:	PCLP53 - Polk County
SR Task ID:	86510
SR Cleanup Responsible:	-
SR Funding Eligibility Type:	-
SR Actual Cost:	Not reported
SR Completion Date:	02-27-1992
SR Payment Date:	Not reported
SR Oral Date:	Not reported
SR Written Date:	Not reported
SR Soil Removal:	Y
SR Free Product Removal:	Not reported
SR Soil Tonnage Removed:	53
SR Soil Treatment:	Not reported
SR Other Treatment:	12/21/04 907.96 TONS
SR Alternate Proc Received Date:	Not reported
SR Alternate Procedure Status:	Not reported
SR Alternate Procedure Status Date:	Not reported
SR Alternate Procedure Comments:	Not reported
SA Task ID:	22128
SA Cleanup Responsible:	-
SA Funding Eligibility Type:	-
SA Actual Cost:	Not reported
SA Completion Date:	Not reported
SA Payment Date:	Not reported
RAP Task ID:	70973
RAP Cleanup Responsible ID:	-
RAP Funding Eligibility Type:	-
RAP Actual Cost:	Not reported
RAP Completion Date:	Not reported
RAP Payment Date:	Not reported
RAP Last Order Approved:	Not reported
RA Task ID:	73596
RA Cleanup Responsible:	-
RA Funding Eligibility Type:	-
RA Years to Complete:	0
RA Actual Cost:	Not reported

Click here for Florida Oculus:

UST:

Facility ID:	9200780
Name:	CAVES AUTO SALES
Address:	4905 E IRLO BRONSON MEMORIAL HWY
City,State,Zip:	SAINT CLOUD, FL 34771
Facility Phone:	4075789598
Facility Status:	CLOSED
Facility Type:	C
Type Description:	Fuel user/Non-retail
Depco:	P
Region:	STATE
Positioning Method:	Not reported
Latitude/Longitude:	Not reported

CAVES AUTO SALES (Continued) **U001378835**

UST:
Tank ID: 1
Tank Capacity: 3000
Tank Location: UNDERGROUND
Tank Status: B-Removed from Site
Status Date: 02/28/1992
Install Date: Not reported
Substance: L
Content Description: Waste Oil
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 2656
Owner Name: BREIER & SEIF PA SCREP #1
Owner Address: 2800 PONCE DE LEON BLVD #1125
Owner Address 2: Not reported
Owner City,State,Zip: CORAL GABLES, FL 33134
Owner Contact: JIM COTTON
Owner Phone: 3054450707

Tank ID: 2
Tank Capacity: 3000
Tank Location: UNDERGROUND
Tank Status: B-Removed from Site
Status Date: 02/28/1992
Install Date: Not reported
Substance: A
Content Description: Leaded Gas
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 2656
Owner Name: BREIER & SEIF PA SCREP #1
Owner Address: 2800 PONCE DE LEON BLVD #1125
Owner Address 2: Not reported
Owner City,State,Zip: CORAL GABLES, FL 33134
Owner Contact: JIM COTTON
Owner Phone: 3054450707

Tank ID: 3
Tank Capacity: 3000
Tank Location: UNDERGROUND
Tank Status: B-Removed from Site
Status Date: 02/28/1992
Install Date: Not reported
Substance: B
Content Description: Unleaded Gas
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 2656
Owner Name: BREIER & SEIF PA SCREP #1
Owner Address: 2800 PONCE DE LEON BLVD #1125

CAVES AUTO SALES (Continued) **U001378835**

Owner Address 2: Not reported
Owner City,State,Zip: CORAL GABLES, FL 33134
Owner Contact: JIM COTTON
Owner Phone: 3054450707

Tank ID: 5
Tank Capacity: 550
Tank Location: UNDERGROUND
Tank Status: B-Removed from Site
Status Date: 02/28/1992
Install Date: Not reported
Substance: L
Content Description: Waste Oil
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 2656
Owner Name: BREIER & SEIF PA SCREP #1
Owner Address: 2800 PONCE DE LEON BLVD #1125
Owner Address 2: Not reported
Owner City,State,Zip: CORAL GABLES, FL 33134
Owner Contact: JIM COTTON
Owner Phone: 3054450707

Tank ID: 4
Tank Capacity: 3000
Tank Location: UNDERGROUND
Tank Status: B-Removed from Site
Status Date: 02/28/1992
Install Date: Not reported
Substance: D
Content Description: Vehicular Diesel
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 2656
Owner Name: BREIER & SEIF PA SCREP #1
Owner Address: 2800 PONCE DE LEON BLVD #1125
Owner Address 2: Not reported
Owner City,State,Zip: CORAL GABLES, FL 33134
Owner Contact: JIM COTTON
Owner Phone: 3054450707

ASBESTOS:
Name: WALGREENS
Address: 4905 E IRLO BRONSON HWY
City,State,Zip: SAINT CLOUD, FL 34771
Facility ID: AS09700547
Notification ID: 107185
Notification Type: COURTESY
Project Type: RENOVATION
Notification Status: REVIEWED

CAVES AUTO SALES (Continued) **U001378835**

Site Name:	WALGREENS 4905 E IRLO BRONSON
Ordered Demolition?:	N
Annual Notification:	Not reported
Owner Name:	WALGREENS CO
Contractor Name:	STANSELL PROPERTIES & DEVELOPMENT, LLC.
Start Date:	03/16/2020
Finish Date:	04/03/2020
Cementitious RACM:	Not reported
Cementitious SF:	Not reported
Floor RACM:	Not reported
Floor SF:	Not reported
Pipe RACM:	Not reported
Pipe SF:	Not reported
CF RACM:	Not reported
Roof RACM:	Not reported
Roof SF:	Not reported
Surface Mat RACM:	Not reported
Surface Mat SF:	Not reported
Waste Disposal Site:	Not reported
Waste Disposal Address:	Not reported
Waste Disposal City:	Not reported
Waste Disposal State:	Not reported
Waste Disposal Zip:	Not reported
Transporter Name:	Not reported
Contractor is Transporter:	Y
Waste Disp ID:	Not reported
Waste Disp Source:	Not reported
Transporter Address:	Not reported
Transporter City:	Not reported
Transporter State:	FL
Transporter Zip:	Not reported
Date Receive:	03/16/2020

Name:	WALGREENS
Address:	4905 E IRLO BRONSON HWY
City,State,Zip:	SAINT CLOUD, FL 34771
Facility ID:	AS09700547
Notification ID:	107185
Notification Type:	COURTESY
Project Type:	RENOVATION
Notification Status:	REVIEWED
Site Name:	WALGREENS 4905 E IRLO BRONSON
Ordered Demolition?:	N
Annual Notification:	Not reported
Owner Name:	WALGREENS CO
Contractor Name:	STANSELL PROPERTIES & DEVELOPMENT, LLC.
Start Date:	03/16/2020
Finish Date:	04/03/2020
Cementitious RACM:	Not reported
Cementitious SF:	Not reported
Floor RACM:	Not reported
Floor SF:	Not reported
Pipe RACM:	Not reported
Pipe SF:	Not reported
CF RACM:	Not reported
Roof RACM:	Not reported
Roof SF:	Not reported

CAVES AUTO SALES (Continued) **U001378835**

Surface Mat RACM:	Not reported
Surface Mat SF:	Not reported
Waste Disposal Site:	Not reported
Waste Disposal Address:	Not reported
Waste Disposal City:	Not reported
Waste Disposal State:	Not reported
Waste Disposal Zip:	Not reported
Transporter Name:	Not reported
Contractor is Transporter:	Y
Waste Disp ID:	Not reported
Waste Disp Source:	Not reported
Transporter Address:	Not reported
Transporter City:	Not reported
Transporter State:	FL
Transporter Zip:	Not reported
Date Receive:	03/16/2020

DWM CONTAM:

Name:	CAVES AUTO SALES
Address:	4905 E IRLO BRONSON MEMORIAL HWY
City,State,Zip:	SAINT CLOUD, FL
Program Site Id:	9200780
Lat DD:	Not reported
Lat MM:	Not reported
Lat SS:	Not reported
Long DD:	Not reported
Long MM:	Not reported
Long SS:	Not reported
Office/ District:	CD
Program Area:	PETROLEUM
Priority Score:	Not reported
Datum:	0
Method:	Not reported
Facility Status:	CLOSED-STCM
Facility Type:	Not reported
Score Effective Date:	Not reported
Score When Ranked:	Not reported
Rank:	Not reported
Operator:	Not reported
Phone:	Not reported
Name Changed:	Not reported
Addr Changed:	Not reported
Related Party ID:	Not reported
Primary RP Role:	Not reported
RP Begin Date:	Not reported
RP Name:	Not reported
RP Address1:	Not reported
RP Address2:	Not reported
RP City:	Not reported
RP State:	Not reported
RP Zip5:	Not reported
RP Zip4:	Not reported
Contact:	Not reported
RP Phone:	Not reported
RP Extension:	Not reported
Site Manager:	Not reported

D9 **HENSEL FARMS PROPERTY** **INST CONTROL** **S117330199**
NW **1650 SOUTH NACRCOOSEE ROAD** **ERIC WASTE CLEANUP** **N/A**
1/4-1/2 **ST. CLOUD, FL 34769**
0.445 mi.
2347 ft. **Site 1 of 2 in cluster D**

Relative:
Lower

Actual:
67 ft.

Inst Control:

Name:	Hensel Farms Property
Address:	1650 SOUTH NACRCOOSEE ROAD
City,State,Zip:	ST. CLOUD, FL 34769
Facility Id:	ERIC_7135
Inst Control Type:	Groundwater Use
Eng Control Type:	None
Contaminated Media:	Groundwater
Contamination:	Metal-Arsenic-Legacy
Lat/Long (dms):	Not reported
Date Amended:	Not reported
Mechanism - Date IC Removed:	Not reported
Mechanism - Program Area:	Not reported
Mechanism - Date Order Issued:	Not reported
Date Removed:	Not reported
Inspection Date:	Not reported
Legal Description:	Not reported
Comments:	Please see legal description for parcel ID. There are two RCs for this site and I have attached them both for your convenience. 06-26-31-0234-0001-0010, 06-26-31-0234-0001-1250,05-26-31-0875-0001-PK20
Township:	Not reported
Range:	Not reported
Parcel ID:	Not reported
Section:	Not reported
Book Number:	4909
Page Number:	2978-2985
Acquisition:	Not reported
Previously Published:	Not reported
Description:	Not reported
Begin Date:	Not reported
DC4 Datum ID:	Not reported
CMC2 Coordinate Method ID:	Not reported
PC2 Proximity ID:	Not reported
Collector User Name:	Not reported
Collection Date:	Not reported
OIC Object of Interest ID:	Not reported
VSC1 Verification Status ID:	Not reported
Primary Facility ID:	Not reported
Primary Facility Name:	Not reported
Primary Site Address Line 2:	Not reported
Primary Site Program Type Key:	Not reported
Primary Site Managing Program:	Not reported
Primary Site DEP Office:	Not reported
Primary Site WMD:	Not reported
Boundary Control ID:	Not reported
Boundary Control Name:	Not reported
Boundary Mechanism Counties:	Not reported
Boundary Mechanism Types:	Not reported
Boundary Mechanism EFF Dates:	Not reported
All Facility ID:	Not reported
All Facility Names:	Not reported
All Site ID:	Not reported

HENSEL FARMS PROPERTY (Continued) **S117330199**

All Site Names:	Not reported
Boundary Mechanism Instr Nums:	Not reported
Primary Site Documents:	Not reported
Name:	Hensel Farms Property
Address:	1650 SOUTH NACRCOOSEE ROAD
City,State,Zip:	ST. CLOUD, FL 34769
Facility Id:	COM_327866
Inst Control Type:	GROUNDWATER USE RESTRICTION
Eng Control Type:	NONE
Contaminated Media:	GROUNDWATER
Contamination:	METAL - ARSENIC
Lat/Long (dms):	28 15 27.3011000 / 81 14 35.7927000
Date Amended:	Not reported
Mechanism - Date IC Removed:	/2/16/02/0
Mechanism - Program Area:	WASTE CLEANUP
Mechanism - Date Order Issued:	Not reported
Date Removed:	Not reported
Inspection Date:	Not reported
Legal Description:	Not reported
Comments:	Please see legal description for parcel ID. There are two RCs for this site and I have attached them both for your convenience. 06-26-31-0234-0001-0010, 06-26-31-0234-0001-1250,05-26-31-0875-0001-PK20
Township:	26S
Range:	30E
Parcel ID:	092630000000300000
Section:	06
Book Number:	4909
Page Number:	2978-2985
Acquisition:	DPHO-DIGITAL ARIAL PHOTOGRAPHY WITH GROUND CONTROL
Previously Published:	Not reported
Description:	Not reported
Begin Date:	Not reported
DC4 Datum ID:	Not reported
CMC2 Coordinate Method ID:	Not reported
PC2 Proximity ID:	Not reported
Collector User Name:	Not reported
Collection Date:	Not reported
OIC Object of Interest ID:	Not reported
VSC1 Verification Status ID:	Not reported
Primary Facility ID:	Not reported
Primary Facility Name:	Not reported
Primary Site Address Line 2:	Not reported
Primary Site Program Type Key:	Not reported
Primary Site Managing Program:	Not reported
Primary Site DEP Office:	Not reported
Primary Site WMD:	Not reported
Boundary Control ID:	Not reported
Boundary Control Name:	Not reported
Boundary Mechanism Counties:	Not reported
Boundary Mechanism Types:	Not reported
Boundary Mechanism EFF Dates:	Not reported
All Facility ID:	Not reported
All Facility Names:	Not reported
All Site ID:	Not reported
All Site Names:	Not reported

HENSEL FARMS PROPERTY (Continued) **S117330199**

Boundary Mechanism Instr Nums: Not reported
Primary Site Documents: Not reported

Click here for Florida Oculus:

ERIC WASTE CLEANUP:

ERIC ID:	ERIC_7135
Name:	Hensel Farms Property
Address:	1650 SOUTH NACRCOOSEE ROAD
City,State,Zip:	SAINT CLOUD, FL 34769
County:	OSCEOLA
Status:	CLOSEDWCOND
Source Facility Name:	ARROW H RANCH
Source Facility ID:	8734370
Program:	Responsible Party Cleanup
Program Type:	RESPONSPARTY
Program Status:	COMPLETEWITHCOND
District:	CD - Central District
WMD:	SFWMD - South Florida Water Management District
ICR Indicator:	Y
Discharge Date:	Not reported
Method ID:	DPHO
Object of Interest:	FACIL
Proximity to Object:	CENTR
Lat DD:	28
Lat MM:	15
Lat SS:	Not reported
Long DD:	81
Long MM:	14
Long SS:	Not reported
X Coord:	669830.99756
Y Coord:	475407.99228
GIS ALB X:	669830.99994
GIS ALB Y:	475407.9976
Collector Username:	WILLIAMS_CA
Collection Date:	03/09/2021
Map Source:	Not reported
Map Source Scale:	Not reported
Interpolation Scale:	Not reported
Coordinate Accuracy ID:	4
Site Manager:	Not reported
Site Phase Description:	Phase 4 - Design Implementation
Offsite Contamination Key:	NOCONTAM
DATUM ID:	WGS84
Documents:	https://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/ERIC_7135/gis-facility!search
Object ID:	17021

C10
SW
1/4-1/2
0.454 mi.
2396 ft.

7-ELEVEN FOOD STORE #32645
4910 E IRLO BRONSON MEM HWY
SAINT CLOUD, FL 34771

Site 3 of 3 in cluster C

LUST
CLEANUP SITES
DWM CONTAM

S130411108
N/A

Relative:
Higher

Actual:
75 ft.

LUST:

Name:	7-ELEVEN FOOD STORE #32645
Address:	4910 E IRLO BRONSON MEM HWY
City,State,Zip:	SAINT CLOUD, FL 34771
Region:	STATE
Facility Id:	9800846
Facility Status:	OPEN
Facility Type:	A - Retail Station
Facility Phone:	(407)403-2995
Facility Cleanup Rank:	Not reported
District:	Central District
Lat/Long (dms):	28 14 44.6372 / 81 14 35.7421999
Section:	Not reported
Township:	Not reported
Range:	Not reported
Feature:	Not reported
Method:	AGPS
Datum:	Not reported
Score:	42
Score Effective Date:	2009-10-16 00:00:00
Score When Ranked:	Not reported
Operator:	DAVID PETERSEN
Name Update:	2008-04-23 00:00:00
Address Update:	2023-10-20 00:00:00

Petroleum Cleanup PCT Facility Score:

Facility Cleanup Status:	ONGO - ONGOING
Contact:	DAVID PETERSEN | MILEI AVILES | JENNIFER DART
Contact Company:	7-ELEVEN INC.
Contact Address:	PO BOX 711
Contact City/State/Zip:	Dallas, TX 75221
Phone:	(407)403-2995
Bad Address Ind:	N
State:	FL
Zip:	34771
Score:	42
Score Effective Date:	2009-10-16 00:00:00
Related Party ID:	20385
Primary RP Role:	ACCOUNT OWNER
RP Begin Date:	1998-10-28
RP Zip:	711
RP Extension:	Not reported

Discharge Cleanup Summary:

Discharge Date:	9/10/2007
PCT Discharge Combined:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	RA - RA ONGOING
Disch Cleanup Status Date:	6/18/2009
Cleanup Work Status:	ACTIVE
Information Source:	D - DISCHARGE NOTIFICATION
Other Source Description:	Not reported
Eligibility Indicator:	I - INELIGIBLE

7-ELEVEN FOOD STORE #32645 (Continued) **S130411108**

Site Manager:	NICOLSON_B
Site Mgr End Date:	Not reported
Tank Office:	PCLP48 - ORANGE COUNTY ENVIRONMENTAL PROTECTION DIV

Contaminated Media:

Discharge Date:	9/10/2007
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	RA - RA ONGOING
Disch Cleanup Status Date:	6/18/2009
Cleanup Work Status:	ACTIVE
Information Source:	D - DISCHARGE NOTIFICATION
Other Source Description:	Not reported
Elig Indicator:	I - INELIGIBLE
Site Manager:	NICOLSON_B
Site Mgr End Date:	Not reported
Tank Office:	PCLP48 - ORANGE COUNTY ENVIRON
Contaminated Drinking Wells:	Not reported
Contaminated Monitoring Well:	No
Contaminated Soil:	Yes
Contaminated Surface Water:	No
Contaminated Ground Water:	No
Pollutant:	B - Unleaded Gas
Pollutant Other Description:	Not reported
Gallons Discharged:	1

Task Information:

District:	CD
Facility ID:	9800846
Facility Status:	OPEN
Facility Type:	A - Retail Station -
County:	OSCEOLA
County ID:	49
Cleanup Eligibility Status:	I
Source Effective Date:	Not reported
Discharge Date:	09-10-2007
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	RA - RA ONGOING
Disch Cleanup Status Date:	06-18-2009
SRC Action Type:	-
SRC Submit Date:	Not reported
SRC Review Date:	Not reported
SRC Completion Status:	-
SRC Issue Date:	Not reported
SRC Comment:	Not reported
Cleanup Work Status:	INACTIVE
Site Mgr:	NICOLSON_B
Site Mgr End Date:	Not reported
Tank Office:	PCLP48 - Orange County
SR Task ID:	Not reported
SR Cleanup Responsible:	-
SR Funding Eligibility Type:	-
SR Actual Cost:	Not reported
SR Completion Date:	Not reported
SR Payment Date:	Not reported
SR Oral Date:	Not reported
SR Written Date:	Not reported
SR Soil Removal:	Not reported

7-ELEVEN FOOD STORE #32645 (Continued) **S130411108**

SR Free Product Removal:	Not reported
SR Soil Tonnage Removed:	Not reported
SR Soil Treatment:	Not reported
SR Other Treatment:	Not reported
SR Alternate Proc Received Date:	Not reported
SR Alternate Procedure Status:	Not reported
SR Alternate Procedure Status Date:	Not reported
SR Alternate Procedure Comments:	Not reported
SA Task ID:	81753
SA Cleanup Responsible:	-
SA Funding Eligibility Type:	-
SA Actual Cost:	Not reported
SA Completion Date:	Not reported
SA Payment Date:	Not reported
RAP Task ID:	86141
RAP Cleanup Responsible ID:	-
RAP Funding Eligibility Type:	-
RAP Actual Cost:	Not reported
RAP Completion Date:	Not reported
RAP Payment Date:	Not reported
RAP Last Order Approved:	Not reported
RA Task ID:	84775
RA Cleanup Responsible:	-
RA Funding Eligibility Type:	-
RA Years to Complete:	Not reported
RA Actual Cost:	Not reported

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CLEANUP SITES:

Name:	7-ELEVEN FOOD STORE #32645
Address:	4910 E IRLO BRONSON MEM HWY
City,State,Zip:	SAINT CLOUD, FL 34771
DEP Cleanup Site Key:	76697024
Source Database Name:	Storage Tank Contamination Monitoring
Source Database Id:	9800846
CPAC Program Area Id:	TK
CLLC Cleanup Category Key:	PETRO
RSC2 Remediation Status Key:	ACTIVE
Data Load Date:	08/10/2023
OC3 Office Id:	CD
Physical Address Line 2:	Not reported
OIC Object Of Interest Id:	FACIL
PC2 Proximity Id:	EXACT
Calc Coordinates Accuracy Level Id:	4
CMC2 Coordinate Method Id:	Digital Aerial Photography With Ground Control
DC4 Datum Id:	High Accuracy Reference Network
VSC1 Verification Status:	REVIEWED
Collect Username:	BRADSHAW_W49
Collect Date:	02/28/2003
Collect Affiliation:	CONTRACTOR
Map Source:	1994 doqs
Map Source Scale:	4065
Interpolation Scale:	Not reported
Verifier Username:	BRADSHAW_W49
Verifier Affiliation:	CONTRACTOR
Verification Date:	02/28/2003

7-ELEVEN FOOD STORE #32645 (Continued) **S130411108**

Verified Coordinate Method Id:	Digital Aerial Photography With Ground Control
Source Database Name Code:	STCM
CMC2 Coordinate Method ID Code:	DPHO
DC4 Datum ID Code:	HARN
Verified Coordinate Method ID Code:	DPHO
Comments:	Not reported
Latitude/Longitude (deg/min/sec):	28 14 / 81 14

DWM CONTAM:

Name:	7-ELEVEN FOOD STORE #32645
Address:	4910 E IRLO BRONSON MEM HWY
City,State,Zip:	SAINT CLOUD, FL 34771
Program Site Id:	9800846
Lat DD:	28
Lat MM:	14
Lat SS:	72
Long DD:	81
Long MM:	14
Long SS:	62
Office/ District:	CD
Program Area:	PETROLEUM
Priority Score:	Not reported
Datum:	Not reported
Method:	AGPS
Facility Status:	OPEN-STCM
Facility Type:	A - Retail Station
Score Effective Date:	2009-10-16 00:00:00
Score When Ranked:	Not reported
Rank:	Not reported
Operator:	Not reported
Phone:	Not reported
Name Changed:	Not reported
Addr Changed:	Not reported
Related Party ID:	20385
Primary RP Role:	ACCOUNT OWNER
RP Begin Date:	10/28/1998
RP Name:	7-ELEVEN INC - GASOLINE COMP DEPT 0148
RP Address1:	PO BOX 711
RP Address2:	ATTN: FL REGION COMPLIANCE MGR
RP City:	DALLAS
RP State:	TX
RP Zip5:	711
RP Zip4:	75221
Contact:	JOSE RIOS / MILEI AVILES / DAVID PETERSEN
RP Phone:	(407)403-2995
RP Extension:	Not reported
Site Manager:	NICOLSON_B

11 SW 1/4-1/2 0.466 mi. 2459 ft. **THE PANTRY #1030 (DBA LIL CHAMP #1030)**
4899 E IRLO BRONSON MEMORIAL HWY
ASHTON, FL 32769

LUST U001365740
UST N/A
DWM CONTAM
Financial Assurance

Relative: Higher

Actual: 74 ft.

LUST:

Name:	THE PANTRY #1030 (DBA LIL CHAMP #1030)
Address:	4899 E IRLO BRONSON MEMORIAL HWY
City,State,Zip:	ASHTON, FL 32769
Region:	STATE
Facility Id:	8731906
Facility Status:	CLOSED
Facility Type:	A - Retail Station
Facility Phone:	(904)464-7219
Facility Cleanup Rank:	Not reported
District:	Central District
Lat/Long (dms):	28 14 47.3577000 / 81 14 38.9763000
Section:	Not reported
Township:	Not reported
Range:	Not reported
Feature:	Not reported
Method:	AGPS
Datum:	0
Score:	Not reported
Score Effective Date:	2007-04-11 00:00:00
Score When Ranked:	Not reported
Operator:	BRENT PUZAK
Name Update:	2010-10-07 00:00:00
Address Update:	2003-08-26 00:00:00

Petroleum Cleanup PCT Facility Score:

Facility Cleanup Status:	CMPL - COMPLETED
Contact:	BRENT PUZAK | RAMON INCIONG (386) 916-6267
Contact Company:	THE PANTRY INC
Contact Address:	305 GREGSON DR
Contact City/State/Zip:	CARY, NC 27511
Phone:	(919)774-6700
Bad Address Ind:	N
State:	FL
Zip:	32769
Score:	Not reported
Score Effective Date:	2007-04-11 00:00:00
Related Party ID:	10563
Primary RP Role:	ACCOUNT OWNER
RP Begin Date:	1994-05-20
RP Zip:	6496
RP Extension:	6549

Discharge Cleanup Summary:

Discharge Date:	8/25/2006
PCT Discharge Combined:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SRCR - SRCR COMPLETE
Disch Cleanup Status Date:	8/20/2009
Cleanup Work Status:	COMPLETED
Information Source:	D - DISCHARGE NOTIFICATION
Other Source Description:	Not reported
Eligibility Indicator:	I - INELIGIBLE

THE PANTRY #1030 (DBA LIL CHAMP #1030) (Continued) **U001365740**

Site Manager:	STULGINSKI_JR
Site Mgr End Date:	7/7/2009
Tank Office:	PCLP53 - FL DOH IN POLK COUNTY
Discharge Date:	10/9/2014
PCT Discharge Combined:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SRCR - SRCR COMPLETE
Disch Cleanup Status Date:	8/19/2015
Cleanup Work Status:	COMPLETED
Information Source:	C - CLOSURE REPORT
Other Source Description:	Not reported
Eligibility Indicator:	I - INELIGIBLE
Site Manager:	GREEN_MN
Site Mgr End Date:	7/24/2015
Tank Office:	PCLP48 - ORANGE COUNTY ENVIRONMENTAL PROTECTION DIV

Contaminated Media:

Discharge Date:	8/25/2006
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SRCR - SRCR COMPLETE
Disch Cleanup Status Date:	8/20/2009
Cleanup Work Status:	COMPLETED
Information Source:	D - DISCHARGE NOTIFICATION
Other Source Description:	Not reported
Elig Indicator:	I - INELIGIBLE
Site Manager:	STULGINSKI_JR
Site Mgr End Date:	7/7/2009
Tank Office:	PCLP53 - FL DOH IN POLK COUNTY
Contaminated Drinking Wells:	Not reported
Contaminated Monitoring Well:	No
Contaminated Soil:	Yes
Contaminated Surface Water:	No
Contaminated Ground Water:	Yes
Pollutant:	H - Generator/Pump Diesel
Pollutant Other Description:	Not reported
Gallons Discharged:	10
Discharge Date:	10/9/2014
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SRCR - SRCR COMPLETE
Disch Cleanup Status Date:	8/19/2015
Cleanup Work Status:	COMPLETED
Information Source:	C - CLOSURE REPORT
Other Source Description:	Not reported
Elig Indicator:	I - INELIGIBLE
Site Manager:	GREEN_MN
Site Mgr End Date:	7/24/2015
Tank Office:	PCLP48 - ORANGE COUNTY ENVIRON
Contaminated Drinking Wells:	Not reported
Contaminated Monitoring Well:	No
Contaminated Soil:	No
Contaminated Surface Water:	No
Contaminated Ground Water:	Yes
Pollutant:	B - Unleaded Gas
Pollutant Other Description:	Not reported
Gallons Discharged:	Not reported

THE PANTRY #1030 (DBA LIL CHAMP #1030) (Continued) **U001365740**

Task Information:

District:	CD
Facility ID:	8731906
Facility Status:	CLOSED
Facility Type:	A - Retail Station -
County:	OSCEOLA
County ID:	49
Cleanup Eligibility Status:	I
Source Effective Date:	07-07-2009
Discharge Date:	08-25-2006
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SRCR - SRCR COMPLETE
Disch Cleanup Status Date:	08-20-2009
SRC Action Type:	SRCR - SITE REHABILITATION COMPLETION REPORT
SRC Submit Date:	06-29-2009
SRC Review Date:	07-07-2009
SRC Completion Status:	A - APPROVED
SRC Issue Date:	08-20-2009
SRC Comment:	Not reported
Cleanup Work Status:	COMPLETED
Site Mgr:	STULGINSKI_JR
Site Mgr End Date:	07-07-2009
Tank Office:	PCLP53 - Polk County
SR Task ID:	Not reported
SR Cleanup Responsible:	-
SR Funding Eligibility Type:	-
SR Actual Cost:	Not reported
SR Completion Date:	Not reported
SR Payment Date:	Not reported
SR Oral Date:	Not reported
SR Written Date:	Not reported
SR Soil Removal:	Not reported
SR Free Product Removal:	Not reported
SR Soil Tonnage Removed:	Not reported
SR Soil Treatment:	Not reported
SR Other Treatment:	Not reported
SR Alternate Proc Received Date:	Not reported
SR Alternate Procedure Status:	Not reported
SR Alternate Procedure Status Date:	Not reported
SR Alternate Procedure Comments:	Not reported
SA Task ID:	80906
SA Cleanup Responsible:	-
SA Funding Eligibility Type:	-
SA Actual Cost:	Not reported
SA Completion Date:	Not reported
SA Payment Date:	Not reported
RAP Task ID:	82144
RAP Cleanup Responsible ID:	-
RAP Funding Eligibility Type:	-
RAP Actual Cost:	Not reported
RAP Completion Date:	Not reported
RAP Payment Date:	Not reported
RAP Last Order Approved:	Not reported
RA Task ID:	82641
RA Cleanup Responsible:	-
RA Funding Eligibility Type:	-
RA Years to Complete:	0

THE PANTRY #1030 (DBA LIL CHAMP #1030) (Continued) **U001365740**

RA Actual Cost:	Not reported
District:	CD
Facility ID:	8731906
Facility Status:	CLOSED
Facility Type:	A - Retail Station -
County:	OSCEOLA
County ID:	49
Cleanup Eligibility Status:	I
Source Effective Date:	07-24-2015
Discharge Date:	10-09-2014
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SRCR - SRCR COMPLETE
Disch Cleanup Status Date:	08-19-2015
SRC Action Type:	SRCR - SITE REHABILITATION COMPLETION REPORT
SRC Submit Date:	07-21-2015
SRC Review Date:	07-24-2015
SRC Completion Status:	A - APPROVED
SRC Issue Date:	08-19-2015
SRC Comment:	Not reported
Cleanup Work Status:	COMPLETED
Site Mgr:	GREEN_MN
Site Mgr End Date:	07-24-2015
Tank Office:	PCLP48 - Orange County
SR Task ID:	Not reported
SR Cleanup Responsible:	-
SR Funding Eligibility Type:	-
SR Actual Cost:	Not reported
SR Completion Date:	Not reported
SR Payment Date:	Not reported
SR Oral Date:	Not reported
SR Written Date:	Not reported
SR Soil Removal:	Not reported
SR Free Product Removal:	Not reported
SR Soil Tonnage Removed:	Not reported
SR Soil Treatment:	Not reported
SR Other Treatment:	Not reported
SR Alternate Proc Received Date:	Not reported
SR Alternate Procedure Status:	Not reported
SR Alternate Procedure Status Date:	Not reported
SR Alternate Procedure Comments:	Not reported
SA Task ID:	92042
SA Cleanup Responsible:	-
SA Funding Eligibility Type:	-
SA Actual Cost:	Not reported
SA Completion Date:	Not reported
SA Payment Date:	Not reported
RAP Task ID:	Not reported
RAP Cleanup Responsible ID:	-
RAP Funding Eligibility Type:	-
RAP Actual Cost:	Not reported
RAP Completion Date:	Not reported
RAP Payment Date:	Not reported
RAP Last Order Approved:	Not reported
RA Task ID:	92505
RA Cleanup Responsible:	-
RA Funding Eligibility Type:	-
RA Years to Complete:	0

THE PANTRY #1030 (DBA LIL CHAMP #1030) (Continued) **U001365740**

RA Actual Cost: Not reported

Click here for Florida Oculus:

UST:

Facility ID:	8731906
Name:	THE PANTRY #1030 (DBA LIL CHAMP #1030)
Address:	4899 E IRLO BRONSON MEMORIAL HWY
City,State,Zip:	ASHTON, FL 32769
Facility Phone:	9044647219
Facility Status:	CLOSED
Facility Type:	A
Type Description:	Retail Station
Depco:	P
Region:	STATE
Positioning Method:	AGPS
Latitude/Longitude:	28 14 39 / 81 14 65

UST:

Tank ID:	5
Tank Capacity:	8000
Tank Location:	UNDERGROUND
Tank Status:	B-Removed from Site
Status Date:	10/20/2014
Install Date:	6/1/2007
Substance:	B
Content Description:	Unleaded Gas
Vessel Indicator:	TANK
DEP Contractor:	P

Owner:

Owner ID:	10563
Owner Name:	THE PANTRY INC
Owner Address:	305 GREGSON DR
Owner Address 2:	ATTN: STORAGE TANK REGIS
Owner City,State,Zip:	CARY, NC 27511
Owner Contact:	BRENT PUZAK | RAMON INCIONG (386) 916-6267
Owner Phone:	9197746700

Tank ID:	4
Tank Capacity:	16000
Tank Location:	UNDERGROUND
Tank Status:	B-Removed from Site
Status Date:	10/20/2014
Install Date:	6/1/2007
Substance:	B
Content Description:	Unleaded Gas
Vessel Indicator:	TANK
DEP Contractor:	P

Owner:

Owner ID:	10563
Owner Name:	THE PANTRY INC
Owner Address:	305 GREGSON DR
Owner Address 2:	ATTN: STORAGE TANK REGIS
Owner City,State,Zip:	CARY, NC 27511
Owner Contact:	BRENT PUZAK | RAMON INCIONG (386) 916-6267

THE PANTRY #1030 (DBA LIL CHAMP #1030) (Continued) **U001365740**

Owner Phone: 9197746700

Tank ID: 2
Tank Capacity: 8000
Tank Location: UNDERGROUND
Tank Status: B-Removed from Site
Status Date: 06/21/2007
Install Date: 10/1/1986
Substance: B
Content Description: Unleaded Gas
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 10563
Owner Name: THE PANTRY INC
Owner Address: 305 GREGSON DR
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: CARY, NC 27511
Owner Contact: BRENT PUZAK | RAMON INCIONG (386) 916-6267
Owner Phone: 9197746700

Tank ID: 3
Tank Capacity: 8000
Tank Location: UNDERGROUND
Tank Status: B-Removed from Site
Status Date: 06/21/2007
Install Date: 10/1/1986
Substance: D
Content Description: Vehicular Diesel
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 10563
Owner Name: THE PANTRY INC
Owner Address: 305 GREGSON DR
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,State,Zip: CARY, NC 27511
Owner Contact: BRENT PUZAK | RAMON INCIONG (386) 916-6267
Owner Phone: 9197746700

Tank ID: 1
Tank Capacity: 8000
Tank Location: UNDERGROUND
Tank Status: B-Removed from Site
Status Date: 06/21/2007
Install Date: 10/1/1986
Substance: B
Content Description: Unleaded Gas
Vessel Indicator: TANK
DEP Contractor: P

Owner:
Owner ID: 10563
Owner Name: THE PANTRY INC

THE PANTRY #1030 (DBA LIL CHAMP #1030) (Continued) **U001365740**

Owner Address:	305 GREGSON DR
Owner Address 2:	ATTN: STORAGE TANK REGIS
Owner City,State,Zip:	CARY, NC 27511
Owner Contact:	BRENT PUZAK | RAMON INCIONG (386) 916-6267
Owner Phone:	9197746700

Tank ID:	6
Tank Capacity:	8000
Tank Location:	UNDERGROUND
Tank Status:	B-Removed from Site
Status Date:	10/20/2014
Install Date:	6/1/2007
Substance:	D
Content Description:	Vehicular Diesel
Vessel Indicator:	TANK
DEP Contractor:	P

Owner:

Owner ID:	10563
Owner Name:	THE PANTRY INC
Owner Address:	305 GREGSON DR
Owner Address 2:	ATTN: STORAGE TANK REGIS
Owner City,State,Zip:	CARY, NC 27511
Owner Contact:	BRENT PUZAK | RAMON INCIONG (386) 916-6267
Owner Phone:	9197746700

DWM CONTAM:

Name:	THE PANTRY #1030 (DBA LIL CHAMP #1030)
Address:	4899 E IRLO BRONSON MEMORIAL HWY
City,State,Zip:	ASHTON, FL
Program Site Id:	8731906
Lat DD:	28
Lat MM:	14
Lat SS:	39
Long DD:	81
Long MM:	14
Long SS:	65
Office/ District:	CD
Program Area:	PETROLEUM
Priority Score:	Not reported
Datum:	0
Method:	AGPS
Facility Status:	CLOSED-STCM
Facility Type:	Not reported
Score Effective Date:	Not reported
Score When Ranked:	Not reported
Rank:	Not reported
Operator:	Not reported
Phone:	Not reported
Name Changed:	Not reported
Addr Changed:	Not reported
Related Party ID:	Not reported
Primary RP Role:	Not reported
RP Begin Date:	Not reported

THE PANTRY #1030 (DBA LIL CHAMP #1030) (Continued) **U001365740**

RP Name:	Not reported
RP Address1:	Not reported
RP Address2:	Not reported
RP City:	Not reported
RP State:	Not reported
RP Zip5:	Not reported
RP Zip4:	Not reported
Contact:	Not reported
RP Phone:	Not reported
RP Extension:	Not reported
Site Manager:	Not reported

Name:	THE PANTRY #1030 (DBA LIL CHAMP #1030)
Address:	4899 E IRLO BRONSON MEMORIAL HWY
City,State,Zip:	ASHTON, FL
Program Site Id:	8731906
Lat DD:	28
Lat MM:	14
Lat SS:	39
Long DD:	81
Long MM:	14
Long SS:	65
Office/ District:	CD
Program Area:	PETROLEUM
Priority Score:	Not reported
Datum:	0
Method:	AGPS
Facility Status:	CLOSED-STCM
Facility Type:	Not reported
Score Effective Date:	Not reported
Score When Ranked:	Not reported
Rank:	Not reported
Operator:	Not reported
Phone:	Not reported
Name Changed:	Not reported
Addr Changed:	Not reported
Related Party ID:	Not reported
Primary RP Role:	Not reported
RP Begin Date:	Not reported
RP Name:	Not reported
RP Address1:	Not reported
RP Address2:	Not reported
RP City:	Not reported
RP State:	Not reported
RP Zip5:	Not reported
RP Zip4:	Not reported
Contact:	Not reported
RP Phone:	Not reported
RP Extension:	Not reported
Site Manager:	Not reported

FL Financial Assurance 3:

Name:	THE PANTRY #1030 (DBA LIL CHAMP #1030)
Address:	4899 E IRLO BRONSON MEMORIAL HWY
City,State,Zip:	ASHTON, FL 32769
Region:	3
Facility ID:	8731906

THE PANTRY #1030 (DBA LIL CHAMP #1030) (Continued) **U001365740**

Facility Phone:	9044647219
Facility Status:	CLOSED
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	ENDURANCE AMERICAN SPECIALTY INS CO
Effective Date:	11/01/2008
Expire Date:	11/01/2009
Owner ID:	10563
Onwer Name:	THE PANTRY INC
Owner Address:	305 GREGSON DR
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	CARY, NC 27511
Contact:	BRENT PUZAK | RAMON INCIONG (386) 916-6267
Resp Party Phone:	9197746700

Name:	THE PANTRY #1030 (DBA LIL CHAMP #1030)
Address:	4899 E IRLO BRONSON MEMORIAL HWY
City,State,Zip:	ASHTON, FL 32769
Region:	3
Facility ID:	8731906
Facility Phone:	9044647219
Facility Status:	CLOSED
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	ENDURANCE AMERICAN SPECIALTY INS CO
Effective Date:	11/01/2009
Expire Date:	11/01/2010
Owner ID:	10563
Onwer Name:	THE PANTRY INC
Owner Address:	305 GREGSON DR
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	CARY, NC 27511
Contact:	BRENT PUZAK | RAMON INCIONG (386) 916-6267
Resp Party Phone:	9197746700

Name:	THE PANTRY #1030 (DBA LIL CHAMP #1030)
Address:	4899 E IRLO BRONSON MEMORIAL HWY
City,State,Zip:	ASHTON, FL 32769
Region:	3
Facility ID:	8731906
Facility Phone:	9044647219
Facility Status:	CLOSED
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	ENDURANCE AMERICAN SPECIALTY INS CO
Effective Date:	11/01/2010
Expire Date:	11/01/2011
Owner ID:	10563
Onwer Name:	THE PANTRY INC
Owner Address:	305 GREGSON DR
Owner Address2:	ATTN: STORAGE TANK REGIS

THE PANTRY #1030 (DBA LIL CHAMP #1030) (Continued) **U001365740**

Owner City,St,Zip:	CARY, NC 27511
Contact:	BRENT PUZAK | RAMON INCIONG (386) 916-6267
Resp Party Phone:	9197746700
Name:	THE PANTRY #1030 (DBA LIL CHAMP #1030)
Address:	4899 E IRLO BRONSON MEMORIAL HWY
City,State,Zip:	ASHTON, FL 32769
Region:	3
Facility ID:	8731906
Facility Phone:	9044647219
Facility Status:	CLOSED
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	IRONSHORE SPECIALTY INSURANCE CO
Effective Date:	11/01/2011
Expire Date:	11/01/2012
Owner ID:	10563
Onwer Name:	THE PANTRY INC
Owner Address:	305 GREGSON DR
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	CARY, NC 27511
Contact:	BRENT PUZAK | RAMON INCIONG (386) 916-6267
Resp Party Phone:	9197746700
Name:	THE PANTRY #1030 (DBA LIL CHAMP #1030)
Address:	4899 E IRLO BRONSON MEMORIAL HWY
City,State,Zip:	ASHTON, FL 32769
Region:	3
Facility ID:	8731906
Facility Phone:	9044647219
Facility Status:	CLOSED
Facility Type:	A
Type Description:	Retail Station
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	IRONSHORE SPECIALTY INSURANCE CO
Effective Date:	11/01/2012
Expire Date:	11/01/2013
Owner ID:	10563
Onwer Name:	THE PANTRY INC
Owner Address:	305 GREGSON DR
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	CARY, NC 27511
Contact:	BRENT PUZAK | RAMON INCIONG (386) 916-6267
Resp Party Phone:	9197746700
Name:	THE PANTRY #1030 (DBA LIL CHAMP #1030)
Address:	4899 E IRLO BRONSON MEMORIAL HWY
City,State,Zip:	ASHTON, FL 32769
Region:	3
Facility ID:	8731906
Facility Phone:	9044647219
Facility Status:	CLOSED
Facility Type:	A
Type Description:	Retail Station

THE PANTRY #1030 (DBA LIL CHAMP #1030) (Continued) **U001365740**

DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	IRONSHORE SPECIALTY INSURANCE CO
Effective Date:	11/01/2013
Expire Date:	11/01/2014
Owner ID:	10563
Onwer Name:	THE PANTRY INC
Owner Address:	305 GREGSON DR
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	CARY, NC 27511
Contact:	BRENT PUZAK | RAMON INCIONG (386) 916-6267
Resp Party Phone:	9197746700

D12 **TURTLE CREEK SUBDIVISION** **RESP PARTY** **S113721687**
NW **APPLE BLOSSOM LN** **N/A**
1/4-1/2 **ST CLOUD, FL**
0.493 mi.
2602 ft. **Site 2 of 2 in cluster D**

Relative: **Lower**

Actual: **65 ft.**

RESP PARTY:

Name:	TURTLE CREEK SUBDIVISION
Address:	APPLE BLOSSOM LN
City,State,Zip:	ST CLOUD, FL
District:	Central District
Site Id:	316652
Project Id:	336437
Site Status:	CLOSED
Project Manager:	HEAVISIDE_C
OGC Case Number:	Not reported
Initial Date Received:	01/16/2013
Contaminants:	Not reported
Offsite Cont Impact:	N
Priority Score:	Not reported
Datum:	NAD83
Method ID:	DPHO
Feature:	at mw 4 arsenic
Object Of Interest:	CAP_RAP SITE
Proximity To Object:	EXACT
Collect Username:	MELTON_D
Collect Affiliation:	Florida Department of Environmental Protection
Collect Program Id:	CR
Collect Date:	02/13/2013
Map Series Used:	Not reported
Map Source Scale:	Not reported
Interpolation Scale:	Not reported
Coordinate Accuracy Id:	3
Verify Method Id:	Not reported
Verifier Username:	Not reported
Verifier Affiliation:	Not reported
Verifying Program Id:	Not reported
Verification Date:	01/01/1970
Decode for District:	Central District
Decode for Datum:	North American Datum of 1983
Decode for Method:	Digital Aerial Photography With Ground Control
Decode for Off Site COC:	No, the best available evidence (such as completed SAR) demonstrates that contamination above applicable standards or criteria DOES NOT extend offsite.
Decode for V_Method:	Not reported

TURTLE CREEK SUBDIVISION (Continued) **S113721687**

Latitude/Longitude (deg/min/sec):	28 15 / 81 14
Source Facility Name:	Not reported
Source Facility ID:	Not reported
Program:	Not reported
Program Type:	Not reported
Program Status:	Not reported
WMD:	Not reported
ICR Indicator:	Not reported
Discharge Date:	Not reported
GIS ALBX:	Not reported
GIS ALBY:	Not reported
Site Manager:	Not reported
Site Phase Description:	Not reported
Offsite Contamination Key:	Not reported
Documents:	Not reported
Objectid:	Not reported

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
		NO SITES FOUND			

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 12/26/2023
Date Data Arrived at EDR: 01/02/2024
Date Made Active in Reports: 01/24/2024
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 02/01/2024
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 12/26/2023
Date Data Arrived at EDR: 01/02/2024
Date Made Active in Reports: 01/24/2024
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 02/01/2024
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 12/26/2023
Date Data Arrived at EDR: 01/02/2024
Date Made Active in Reports: 01/24/2024
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 02/01/2024
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 12/20/2023
Date Data Arrived at EDR: 12/20/2023
Date Made Active in Reports: 01/24/2024
Number of Days to Update: 35

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 12/20/2023
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 02/01/2024
Next Scheduled EDR Contact: 04/22/2024
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 02/01/2024
Next Scheduled EDR Contact: 04/22/2024
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/06/2023
Date Made Active in Reports: 12/12/2023
Number of Days to Update: 6

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 12/06/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/06/2023
Date Made Active in Reports: 12/12/2023
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 12/06/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/06/2023
Date Made Active in Reports: 12/12/2023
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 12/06/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/06/2023
Date Made Active in Reports: 12/12/2023
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 12/06/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/06/2023
Date Made Active in Reports: 12/12/2023
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 12/06/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 08/03/2023
Date Data Arrived at EDR: 08/07/2023
Date Made Active in Reports: 10/10/2023
Number of Days to Update: 64

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/02/2024
Next Scheduled EDR Contact: 05/20/2024
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 08/21/2023
Date Data Arrived at EDR: 08/21/2023
Date Made Active in Reports: 11/07/2023
Number of Days to Update: 78

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 11/17/2023
Next Scheduled EDR Contact: 03/04/2024
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 08/21/2023
Date Data Arrived at EDR: 08/21/2023
Date Made Active in Reports: 11/07/2023
Number of Days to Update: 78

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 11/17/2023
Next Scheduled EDR Contact: 03/04/2024
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/18/2023
Date Data Arrived at EDR: 09/20/2023
Date Made Active in Reports: 12/11/2023
Number of Days to Update: 82

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 12/13/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

SHWS: Florida's State-Funded Action Sites

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 02/09/2023
Date Data Arrived at EDR: 02/14/2023
Date Made Active in Reports: 05/09/2023
Number of Days to Update: 84

Source: Department of Environmental Protection
Telephone: 850-488-0190
Last EDR Contact: 11/16/2023
Next Scheduled EDR Contact: 02/26/2024
Data Release Frequency: Semi-Annually

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF: Solid Waste Facility Database

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 10/09/2023
Date Data Arrived at EDR: 10/09/2023
Date Made Active in Reports: 12/20/2023
Number of Days to Update: 72

Source: Department of Environmental Protection
Telephone: 850-922-7121
Last EDR Contact: 01/10/2024
Next Scheduled EDR Contact: 04/22/2024
Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

LUST: Petroleum Contamination Detail Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 10/23/2023
Date Data Arrived at EDR: 10/24/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 86

Source: Department of Environmental Protection
Telephone: 850-245-8839
Last EDR Contact: 01/23/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Quarterly

LAST: Leaking Aboveground Storage Tank Listing

The file for Leaking Aboveground Storage Tanks. Please remember STCM does not track the source of the discharge so the agency provides a list of facilities with an aboveground tank and an open discharge split by facilities with aboveground tanks only and facilities with aboveground and underground tanks.

Date of Government Version: 10/23/2023
Date Data Arrived at EDR: 10/24/2023
Date Made Active in Reports: 01/12/2024
Number of Days to Update: 80

Source: Department of Environmental Protection
Telephone: 850-245-8799
Last EDR Contact: 01/23/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/19/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/19/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/14/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 03/08/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 82

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 01/11/2024
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

FF TANKS: Federal Facilities Listing
A listing of federal facilities with storage tanks.

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 09/20/2023
Date Made Active in Reports: 12/08/2023
Number of Days to Update: 79

Source: Department of Environmental Protection
Telephone: 850-245-8250
Last EDR Contact: 12/13/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Quarterly

UST: Storage Tank Facility Information
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 11/09/2023
Date Data Arrived at EDR: 11/09/2023
Date Made Active in Reports: 02/01/2024
Number of Days to Update: 84

Source: Department of Environmental Protection
Telephone: 850-245-8839
Last EDR Contact: 01/22/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Quarterly

AST: Storage Tank Facility Information
Registered Aboveground Storage Tanks.

Date of Government Version: 11/09/2023
Date Data Arrived at EDR: 11/09/2023
Date Made Active in Reports: 02/01/2024
Number of Days to Update: 84

Source: Department of Environmental Protection
Telephone: 850-245-8839
Last EDR Contact: 01/22/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Quarterly

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/19/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/14/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

TANKS: Storage Tank Facility List

This listing includes storage tank facilities that do not have tank information. The tanks have either be closed or removed from the site, but the facilities were still registered at some point in history.

Date of Government Version: 11/09/2023
Date Data Arrived at EDR: 11/09/2023
Date Made Active in Reports: 02/02/2024
Number of Days to Update: 85

Source: Department of Environmental Protection
Telephone: 850-245-8841
Last EDR Contact: 01/22/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Quarterly

State and tribal institutional control / engineering control registries

ENG CONTROLS: Institutional Controls Registry

The registry is a database of all contaminated sites in the state of Florida which are subject to engineering controls. Engineering Controls encompass a variety of engineered remedies to contain and/or reduce contamination, and/or physical barriers intended to limit access to property. ECs include fences, signs, guards, landfill caps, provision of potable water, slurry walls, sheet pile (vertical caps), pumping and treatment of groundwater, monitoring wells, and vapor extraction systems.

Date of Government Version: 08/11/2023
Date Data Arrived at EDR: 09/26/2023
Date Made Active in Reports: 12/19/2023
Number of Days to Update: 84

Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 12/20/2023
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Semi-Annually

Inst Control: Institutional Controls Registry

The registry is a database of all contaminated sites in the state of Florida which are subject to institutional and engineering controls.

Date of Government Version: 08/11/2023
Date Data Arrived at EDR: 09/26/2023
Date Made Active in Reports: 12/19/2023
Number of Days to Update: 84

Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 12/20/2023
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Semi-Annually

Lists of state and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 12/12/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Varies

VCP: Voluntary Cleanup Sites

Listing of closed and active voluntary cleanup sites.

Date of Government Version: 07/01/2022
Date Data Arrived at EDR: 08/11/2022
Date Made Active in Reports: 11/02/2022
Number of Days to Update: 83
Source: Department of Environmental Protection
Telephone: 850-245-8705
Last EDR Contact: 11/16/2023
Next Scheduled EDR Contact: 02/26/2024
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27
Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

Lists of state and tribal brownfield sites

BROWNFIELDS: Brownfields Sites Database
Brownfields are defined by the Florida Department of Environmental Protection (FDEP) as abandoned, idled, or underused industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.

Date of Government Version: 03/08/2023
Date Data Arrived at EDR: 03/28/2023
Date Made Active in Reports: 06/15/2023
Number of Days to Update: 79
Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 12/20/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Semi-Annually

BROWNFIELDS AREAS: Brownfields Areas Database
A "brownfield area" means a contiguous area of one or more brownfield sites, some of which may not be contaminated, that has been designated as such by a local government resolution. Such areas may include all or portions of community redevelopment areas, enterprise zones, empowerment zones, other such designated economically deprived communities and areas, and Environmental Protection Agency (EPA) designated brownfield pilot projects. This layer provides a polygon representation of the boundaries of these designated Brownfield Areas in Florida.

Date of Government Version: 08/03/2023
Date Data Arrived at EDR: 09/26/2023
Date Made Active in Reports: 12/19/2023
Number of Days to Update: 84
Source: Department of Environmental Protection
Telephone: 850-245-8934
Last EDR Contact: 12/20/2023
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Quarterly

BSRA: Brownfield Site Rehabilitation Agreements Listing
The BSRA provides DEP and the public assurance that site rehabilitation will be conducted in accordance with Florida Statutes and DEP's Contaminated Site Cleanup Criteria rule. In addition, the BSRA provides limited liability protection for the voluntary responsible party. The BSRA contains various commitments by the voluntary responsible party, including milestones for completion of site rehabilitation tasks and submittal of technical reports and plans.
It also contains a commitment by DEP to review technical reports according to an agreed upon schedule. Only those brownfield sites with an executed BSRA are eligible to apply for a voluntary cleanup tax credit incentive pursuant to Section 376.30781, Florida Statutes.

Date of Government Version: 08/09/2023
Date Data Arrived at EDR: 09/26/2023
Date Made Active in Reports: 12/19/2023
Number of Days to Update: 84
Source: Department of Environmental Protection
Telephone: 850-245-8934
Last EDR Contact: 12/20/2023
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 08/15/2023
Date Data Arrived at EDR: 08/30/2023
Date Made Active in Reports: 12/01/2023
Number of Days to Update: 93
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 12/14/2023
Next Scheduled EDR Contact: 03/25/2024
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: Recycling Centers

A listing of recycling centers located in the state of Florida.

Date of Government Version: 08/17/2023
Date Data Arrived at EDR: 10/09/2023
Date Made Active in Reports: 12/19/2023
Number of Days to Update: 71
Source: Department of Environmental Protection
Telephone: 850-245-8718
Last EDR Contact: 01/11/2024
Next Scheduled EDR Contact: 04/22/2024
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52
Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 01/26/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137
Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 01/11/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39
Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 11/17/2023
Date Data Arrived at EDR: 11/17/2023
Date Made Active in Reports: 02/07/2024
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 11/17/2023
Next Scheduled EDR Contact: 03/04/2024
Data Release Frequency: No Update Planned

PRIORITYCLEANERS: Priority Ranking List

The Florida Legislature has established a state-funded program to cleanup properties that are contaminated as a result of the operations of a drycleaning facility.

Date of Government Version: 08/17/2023
Date Data Arrived at EDR: 11/07/2023
Date Made Active in Reports: 02/02/2024
Number of Days to Update: 87

Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 02/06/2024
Next Scheduled EDR Contact: 05/20/2024
Data Release Frequency: Varies

FL SITES: Sites List

This summary status report was developed from a number of lists including the Eckhardt list, the Moffit list, the EPA Hazardous Waste Sites list, EPA's Emergency & Remedial Response information System list (RCRA Section 3012) & existing department lists such as the obsolete uncontrolled Hazardous Waste Sites list. This list is no longer updated.

Date of Government Version: 12/31/1989
Date Data Arrived at EDR: 05/09/1994
Date Made Active in Reports: 08/04/1994
Number of Days to Update: 87

Source: Department of Environmental Protection
Telephone: 850-245-8705
Last EDR Contact: 03/24/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 11/17/2023
Date Data Arrived at EDR: 11/17/2023
Date Made Active in Reports: 02/07/2024
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 11/17/2023
Next Scheduled EDR Contact: 03/04/2024
Data Release Frequency: Quarterly

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 11/14/2023
Date Data Arrived at EDR: 12/22/2023
Date Made Active in Reports: 01/24/2024
Number of Days to Update: 33

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 02/01/2024
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 09/18/2023
Date Data Arrived at EDR: 09/20/2023
Date Made Active in Reports: 11/14/2023
Number of Days to Update: 55

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 12/13/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Quarterly

SPILLS: Oil and Hazardous Materials Incidents
Statewide oil and hazardous materials inland incidents.

Date of Government Version: 09/27/2023
Date Data Arrived at EDR: 09/28/2023
Date Made Active in Reports: 12/19/2023
Number of Days to Update: 82

Source: Department of Environmental Protection
Telephone: 850-245-2010
Last EDR Contact: 12/26/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Semi-Annually

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 12/10/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/04/2013
Number of Days to Update: 60

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SPILLS 80: SPILLS80 data from FirstSearch
Spills 80 includes those spill and release records available from FirstSearch databases prior to 1990. Typically, they may include chemical, oil and/or hazardous substance spills recorded before 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 80.

Date of Government Version: 09/01/2001
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/06/2013
Number of Days to Update: 62

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/04/2023
Date Data Arrived at EDR: 12/06/2023
Date Made Active in Reports: 12/12/2023
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 12/06/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 09/28/2023
Date Data Arrived at EDR: 11/10/2023
Date Made Active in Reports: 02/07/2024
Number of Days to Update: 89

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 11/10/2023
Next Scheduled EDR Contact: 02/26/2024
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 01/10/2024
Next Scheduled EDR Contact: 04/22/2024
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 01/05/2024
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 07/30/2021
Date Data Arrived at EDR: 02/03/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/06/2024
Next Scheduled EDR Contact: 05/20/2024
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 09/18/2023
Date Data Arrived at EDR: 09/20/2023
Date Made Active in Reports: 12/12/2023
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 12/13/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 01/29/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/02/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 06/14/2022
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 283

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 12/14/2023
Next Scheduled EDR Contact: 03/25/2024
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 11/13/2023
Date Made Active in Reports: 02/07/2024
Number of Days to Update: 86

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 11/13/2023
Next Scheduled EDR Contact: 02/26/2024
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 10/19/2023
Date Data Arrived at EDR: 10/20/2023
Date Made Active in Reports: 01/16/2024
Number of Days to Update: 88

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 01/17/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 12/26/2023
Date Data Arrived at EDR: 01/02/2024
Date Made Active in Reports: 01/24/2024
Number of Days to Update: 22

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 02/01/2024
Next Scheduled EDR Contact: 03/11/2024
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 09/01/2023
Date Data Arrived at EDR: 09/27/2023
Date Made Active in Reports: 12/21/2023
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 01/12/2024
Next Scheduled EDR Contact: 04/19/2024
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 02/01/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/20/2023
Date Data Arrived at EDR: 04/04/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 66

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 01/05/2024
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/26/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/20/2023
Date Data Arrived at EDR: 09/01/2023
Date Made Active in Reports: 09/20/2023
Number of Days to Update: 19
Source: Nuclear Regulatory Commission
Telephone: 301-415-0717
Last EDR Contact: 01/11/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 04/14/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 87
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 11/27/2023
Next Scheduled EDR Contact: 03/11/2024
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 11/27/2023
Next Scheduled EDR Contact: 03/11/2024
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 02/02/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 12/19/2023
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 01/05/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 01/11/2024
Date Made Active in Reports: 01/16/2024
Number of Days to Update: 5

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 12/06/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 01/02/2024
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 03/03/2023
Date Data Arrived at EDR: 03/03/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 98

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 01/29/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 11/09/2023
Next Scheduled EDR Contact: 02/26/2024
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 12/26/2024
Date Data Arrived at EDR: 01/02/2024
Date Made Active in Reports: 01/24/2024
Number of Days to Update: 22

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 02/01/2024
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/01/2023
Date Data Arrived at EDR: 08/22/2023
Date Made Active in Reports: 11/07/2023
Number of Days to Update: 77

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 11/17/2023
Next Scheduled EDR Contact: 03/04/2024
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data
Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 01/02/2024
Date Data Arrived at EDR: 01/03/2024
Date Made Active in Reports: 01/04/2024
Number of Days to Update: 1

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 05/20/2024
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing
This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 01/07/2022
Date Data Arrived at EDR: 02/24/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 82

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 11/20/2023
Next Scheduled EDR Contact: 03/04/2024
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing
Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 11/20/2023
Next Scheduled EDR Contact: 03/04/2024
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 08/23/2022
Date Data Arrived at EDR: 11/22/2022
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 98

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 11/20/2023
Next Scheduled EDR Contact: 03/04/2024
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 11/28/2023
Date Data Arrived at EDR: 11/29/2023
Date Made Active in Reports: 12/11/2023
Number of Days to Update: 12

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 11/28/2023
Next Scheduled EDR Contact: 03/18/2024
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 11/03/2023
Date Data Arrived at EDR: 11/08/2023
Date Made Active in Reports: 11/20/2023
Number of Days to Update: 12

Source: EPA
Telephone: (404) 562-9900
Last EDR Contact: 11/08/2023
Next Scheduled EDR Contact: 03/11/2024
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/06/2023
Date Data Arrived at EDR: 09/13/2023
Date Made Active in Reports: 12/11/2023
Number of Days to Update: 89

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 01/05/2024
Next Scheduled EDR Contact: 04/22/2024
Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 11/15/2023
Next Scheduled EDR Contact: 03/04/2024
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/23/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 01/04/2024
Number of Days to Update: 93

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 12/28/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/10/2023
Date Data Arrived at EDR: 11/10/2023
Date Made Active in Reports: 02/07/2024
Number of Days to Update: 89

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 11/10/2023
Next Scheduled EDR Contact: 02/26/2024
Data Release Frequency: Quarterly

PFAS NPL: Superfund Sites with PFAS Detections Information

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

Date of Government Version: 09/23/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 12/21/2023
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 703-603-8895
Last EDR Contact: 12/28/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

PFAS FEDERAL SITES: Federal Sites PFAS Information

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities.

Date of Government Version: 09/23/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 12/21/2023
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 12/28/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

PFAS TSCA: PFAS Manufacture and Imports Information

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 01/04/2024
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 12/28/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

PFAS TRIS: List of PFAS Added to the TRI

Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) immediately added certain per- and polyfluoroalkyl substances (PFAS) to the list of chemicals covered by the Toxics Release Inventory (TRI) under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and provided a framework for additional PFAS to be added to TRI on an annual basis.

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 01/04/2024
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-566-0250
Last EDR Contact: 12/28/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

PFAS RCRA MANIFEST: PFAS Transfers Identified In the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST_HANDLING_INSTR), Non-hazardous waste description (NON_HAZ_WASTE_DESCRIPTION), DOT printed information (DOT_PRINTED_INFORMATION), Waste line handling instructions (WASTE_LINE_HANDLING_INSTR), Waste residue comments (WASTE_RESIDUE_COMMENTS).

Date of Government Version: 12/28/2023
Date Data Arrived at EDR: 12/28/2023
Date Made Active in Reports: 01/04/2024
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 12/28/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

PFAS ATSDR: PFAS Contamination Site Location Listing

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used.

Date of Government Version: 06/24/2020
Date Data Arrived at EDR: 03/17/2021
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 601

Source: Department of Health & Human Services
Telephone: 202-741-5770
Last EDR Contact: 01/22/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Varies

PFAS WQP: Ambient Environmental Sampling for PFAS

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

Date of Government Version: 09/23/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/10/2023
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 12/28/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

PFAS NPDES: Clean Water Act Discharge Monitoring Information

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits. Caveats and Limitations: Less than half of states have required PFAS monitoring for at least one of their permittees and fewer states have established PFAS effluent limits for permittees. New rulemakings have been initiated that may increase the number of facilities monitoring for PFAS in the future.

Date of Government Version: 09/23/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 01/04/2024
Number of Days to Update: 93

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 12/28/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

Date of Government Version: 09/23/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 12/21/2023
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 12/28/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

PFAS ECHO FIRE TRAINING: Facilities in Industries that May Be Handling PFAS Listing

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facilitys name to identify sites where fire-fighting foam may have been used in training exercises. Additionally, you may view an example spreadsheet of the subset of fire training facility data, as well as the keywords used in selecting or deselecting a facility for the subset. as well as the keywords used in selecting or deselecting a facility for the subset. These keywords were tested to maximize accuracy in selecting facilities that may use fire-fighting foam in training exercises, however, due to the lack of a required reporting field in the data systems for designating fire training sites, this methodology may not identify all fire training sites or may potentially misidentify them.

Date of Government Version: 09/23/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 12/21/2023
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 12/28/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

PFAS PART 139 AIRPORT: All Certified Part 139 Airports PFAS Information Listing

Since July 1, 2006, all certified part 139 airports are required to have fire-fighting foam onsite that meet military specifications (MIL-F-24385) (14 CFR 139.317). To date, these military specification fire-fighting foams are fluorinated and have been historically used for training and extinguishing. The 2018 FAA Reauthorization Act has a provision stating that no later than October 2021, FAA shall not require the use of fluorinated AFFF. This provision does not prohibit the use of fluorinated AFFF at Part 139 civilian airports; it only prohibits FAA from mandating its use. The Federal Aviation Administration?s document AC 150/5210-6D - Aircraft Fire Extinguishing Agents provides guidance on Aircraft Fire Extinguishing Agents, which includes Aqueous Film Forming Foam (AFFF).

Date of Government Version: 09/23/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 12/21/2023
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 12/28/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

AQUEOUS FOAM NRC: Aqueous Foam Related Incidents Listing

The National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the ?Material Involved? or ?Incident Description? fields.

Date of Government Version: 09/23/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 12/21/2023
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-267-2675
Last EDR Contact: 12/28/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 12/16/2016
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 02/07/2024
Number of Days to Update: 2588

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 12/27/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: No Update Planned

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 12/27/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

BIOSOLIDS: ICIS-NPDES Biosolids Facility Data

The data reflects compliance information about facilities in the biosolids program.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 01/03/2024
Date Made Active in Reports: 01/16/2024
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 202-564-4700
Last EDR Contact: 01/03/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

PFAS: PFOS and PFOA stand for perfluorooctane sulfonate and perfluorooctanoic acid
PFOS and PFOA stand for perfluorooctane sulfonate and perfluorooctanoic acid, respectively. Both are fluorinated organic chemicals, part of a larger family of compounds referred to as perfluoroalkyl substances (PFASs).

Date of Government Version: 10/30/2023
Date Data Arrived at EDR: 11/03/2023
Date Made Active in Reports: 11/08/2023
Number of Days to Update: 5
Source: Department of Environmental Protection
Telephone: 850-245-8690
Last EDR Contact: 01/22/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Varies

AQUEOUS FOAM: Former Fire Training Facility Assessments Listing
DEP has conducted initial environmental assessments related to the historic and current use of chemicals found in aqueous film forming foam (AFFF) at fire training facilities throughout Florida

Date of Government Version: 05/11/2023
Date Data Arrived at EDR: 05/16/2023
Date Made Active in Reports: 05/31/2023
Number of Days to Update: 15
Source: Department of Environmental Protection
Telephone: 850-245-8690
Last EDR Contact: 11/28/2023
Next Scheduled EDR Contact: 03/18/2024
Data Release Frequency: Varies

AIRS: Permitted Facilities Listing
A listing of Air Resources Management permits.

Date of Government Version: 10/23/2023
Date Data Arrived at EDR: 10/25/2023
Date Made Active in Reports: 01/16/2024
Number of Days to Update: 83
Source: Department of Environmental Protection
Telephone: 850-921-9558
Last EDR Contact: 01/22/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Varies

ASBESTOS: Asbestos Notification Listing
Asbestos sites

Date of Government Version: 11/08/2023
Date Data Arrived at EDR: 11/09/2023
Date Made Active in Reports: 01/31/2024
Number of Days to Update: 83
Source: Department of Environmental Protection
Telephone: 850-717-9086
Last EDR Contact: 11/08/2023
Next Scheduled EDR Contact: 02/26/2024
Data Release Frequency: Varies

CLEANUP SITES: DEP Cleanup Sites - Contamination Locator Map Listing
This listing includes the locations of waste cleanup sites from various programs. The source of the cleanup site data includes Hazardous Waste programs, Site Investigation Section, Compliance and Enforcement Tracking, Drycleaning State Funded Cleanup Program (possibly other state funded cleanup), Storage Tank Contamination Monitoring.

Date of Government Version: 08/10/2023
Date Data Arrived at EDR: 08/10/2023
Date Made Active in Reports: 10/24/2023
Number of Days to Update: 75
Source: Department of Environmental Protection
Telephone: 866-282-0787
Last EDR Contact: 11/22/2023
Next Scheduled EDR Contact: 03/04/2024
Data Release Frequency: Quarterly

DEDB: Ethylene Dibromide Database Results
Ethylene dibromide (EDB), a soil fumigant, that has been detected in drinking water wells. The amount found exceeds the maximum contaminant level as stated in Chapter 62-550 or 520. It is a potential threat to public health when present in drinking water.

Date of Government Version: 06/13/2023
Date Data Arrived at EDR: 06/22/2023
Date Made Active in Reports: 09/12/2023
Number of Days to Update: 82
Source: Department of Environmental Protection
Telephone: 850-245-8335
Last EDR Contact: 12/05/2023
Next Scheduled EDR Contact: 03/25/2024
Data Release Frequency: Varies

DRYCLEANERS: Drycleaning Facilities

The Drycleaners database, maintained by the Department of Environmental Protection, provides information about permitted dry cleaner facilities.

Date of Government Version: 10/16/2023
Date Data Arrived at EDR: 10/17/2023
Date Made Active in Reports: 01/05/2024
Number of Days to Update: 80

Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 01/16/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Semi-Annually

DWM CONTAM: DWM CONTAMINATED SITES

A listing of active or known sites. The listing includes sites that need cleanup but are not actively being working on because the agency currently does not have funding (primarily petroleum and drycleaning).

Date of Government Version: 07/14/2023
Date Data Arrived at EDR: 10/04/2023
Date Made Active in Reports: 12/20/2023
Number of Days to Update: 77

Source: Department of Environmental Protection
Telephone: 850-245-7503
Last EDR Contact: 01/05/2024
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

A list of hazardous waste facilities required to provide financial assurance under RCRA.

Date of Government Version: 10/23/2023
Date Data Arrived at EDR: 10/24/2023
Date Made Active in Reports: 01/12/2024
Number of Days to Update: 80

Source: Department of Environmental Protection
Telephone: 850-245-8793
Last EDR Contact: 01/23/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Semi-Annually

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities.

Date of Government Version: 10/23/2023
Date Data Arrived at EDR: 10/24/2023
Date Made Active in Reports: 01/12/2024
Number of Days to Update: 80

Source: Department of Environmental Protection
Telephone: 850-245-8743
Last EDR Contact: 01/23/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Semi-Annually

Financial Assurance 3: Financial Assurance Information Listing

A listing of financial assurance information for storage tanks sites.

Date of Government Version: 11/09/2023
Date Data Arrived at EDR: 11/09/2023
Date Made Active in Reports: 02/02/2024
Number of Days to Update: 85

Source: Department of Environmental Protection
Telephone: 850-245-8853
Last EDR Contact: 01/22/2024
Next Scheduled EDR Contact: 02/05/2024
Data Release Frequency: Quarterly

FL Cattle Dip. Vats: Cattle Dipping Vats

From the 1910's through the 1950's, these vats were filled with an arsenic solution for the control and eradication of the cattle fever tick. Other pesticides, such as DDT, were also widely used. By State law, all cattle, horses, mules, goats, and other susceptible animals were required to be dipped every 14 days. Under certain circumstances, the arsenic and other pesticides remaining at the site may present an environmental or public health hazard.

Date of Government Version: 09/27/2019
Date Data Arrived at EDR: 01/10/2020
Date Made Active in Reports: 02/11/2020
Number of Days to Update: 32

Source: Department of Environmental Protection
Telephone: 850-245-4444
Last EDR Contact: 01/05/2024
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: No Update Planned

HAZ WASTE: Hazardous Waste Information Listing

The records in this data set are generated by county SQG Assessment, Notification and Verification Programs on-site surveys (see 403.7225 FS). The waste records are wastes observed during county inspections. Even though this state program targets SQGs and VSQGs for outreach, some counties choose to additionally look at their LQGs.

Date of Government Version: 11/10/2023
Date Data Arrived at EDR: 11/10/2023
Date Made Active in Reports: 02/02/2024
Number of Days to Update: 84

Source: Department of Environmental Protection
Telephone: 850-245-8705
Last EDR Contact: 08/14/2023
Next Scheduled EDR Contact: 02/26/2024
Data Release Frequency: Quarterly

HW GEN: Hazardous Waste Generators

Small Quantity Hazardous Waste Generators are regulated under the federal Resource Conservation and Recovery Act (RCRA) and applicable state regulations as generators of hazardous wastes in quantities greater than 100 Kg but less than 1,000 Kg in any one calendar month. Large Quantity Generators of Hazardous Waste are tracked in this coverage based on their notification to the Department of Environmental Protection as to their handler status, or based on inspections conducted at their facilities. These facilities are regulated under the federal Resource Conservation and Recovery Act (RCRA) and applicable state regulations as generators of hazardous wastes in quantities equal to or greater than 1,000 Kg in any one calendar month.

Date of Government Version: 08/11/2023
Date Data Arrived at EDR: 09/20/2023
Date Made Active in Reports: 12/08/2023
Number of Days to Update: 79

Source: Department of Environmental Protection
Telephone: 850-245-8758
Last EDR Contact: 12/13/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Quarterly

RESP PARTY: Responsible Party Sites Listing

Open, inactive and closed responsible party sites

Date of Government Version: 08/11/2023
Date Data Arrived at EDR: 09/26/2023
Date Made Active in Reports: 12/19/2023
Number of Days to Update: 84

Source: Department of Environmental Protection
Telephone: 850-245-8758
Last EDR Contact: 12/20/2023
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Quarterly

SOLCP: State-Owned Lands Cleanup Program Listing

The State-Owned Lands Cleanup Program (SOLCP) was created by the legislature in 2001 as a mechanism to identify and reduce the states possible risk and liability associated with potentially contaminated sites on state-owned property.

Date of Government Version: 11/06/2023
Date Data Arrived at EDR: 11/07/2023
Date Made Active in Reports: 02/02/2024
Number of Days to Update: 87

Source: Department of Environmental Protection
Telephone: 850-245-8952
Last EDR Contact: 02/06/2024
Next Scheduled EDR Contact: 05/20/2024
Data Release Frequency: Varies

SITE INV SITES: Site Investigation Section Sites Listing

Statewide coverage of Site Investigation Section (SIS) sites. Site Investigation is a Section within the Bureau of Waste Cleanup, Division of Waste Management. SIS provides technical support to FDEP District Waste Cleanup Programs and conducts contamination assessments throughout the state.

Date of Government Version: 11/10/2023
Date Data Arrived at EDR: 11/10/2023
Date Made Active in Reports: 02/02/2024
Number of Days to Update: 84

Source: Department of Environmental Protection
Telephone: 850-245-8953
Last EDR Contact: 11/10/2023
Next Scheduled EDR Contact: 02/26/2024
Data Release Frequency: Quarterly

TIER 2: Tier 2 Facility Listing

A listing of facilities which store or manufacture hazardous materials that submit a chemical inventory report.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 06/07/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 82
Source: Department of Environmental Protection
Telephone: 850-413-9970
Last EDR Contact: 11/28/2023
Next Scheduled EDR Contact: 03/18/2024
Data Release Frequency: Varies

UIC: Underground Injection Wells Database Listing
A listing of Class I wells. Class I wells are used to inject hazardous waste, nonhazardous waste, or municipal waste below the lowermost USDW.

Date of Government Version: 10/11/2023
Date Data Arrived at EDR: 10/11/2023
Date Made Active in Reports: 01/04/2024
Number of Days to Update: 85
Source: Department of Environmental Protection
Telephone: 850-245-8655
Last EDR Contact: 01/11/2024
Next Scheduled EDR Contact: 04/29/2024
Data Release Frequency: Varies

WASTEWATER: Wastewater Facility Regulation Database
Domestic and industrial wastewater facilities.

Date of Government Version: 07/18/2023
Date Data Arrived at EDR: 10/16/2023
Date Made Active in Reports: 01/08/2024
Number of Days to Update: 84
Source: Department of Environmental Protection
Telephone: 850-245-8600
Last EDR Contact: 01/30/2024
Next Scheduled EDR Contact: 05/13/2024
Data Release Frequency: Quarterly

ERIC WASTE CLEANUP: Environmental Restoration Integrated Cleanup Listing
ERIC (Environmental Restoration Integrated Cleanup) is a single database for tracking all of the contaminated site cleanup activities in the Division of Waste Management (DWM). It was developed to bring together 11 different data systems to a single location that would allow tracking of a contaminated site throughout the course of cleanup regardless of which program area took the lead.

Date of Government Version: 12/19/2023
Date Data Arrived at EDR: 12/19/2023
Date Made Active in Reports: 12/21/2023
Number of Days to Update: 2
Source: Department of Environmental Protection
Telephone: 850-245-8270
Last EDR Contact: 12/19/2023
Next Scheduled EDR Contact: 04/08/2024
Data Release Frequency: Varies

UST FINDER: UST Finder Database
EPA developed UST Finder, a web map application containing a comprehensive, state-sourced national map of underground storage tank (UST) and leaking UST (LUST) data. It provides the attributes and locations of active and closed USTs, UST facilities, and LUST sites from states and from Tribal lands and US territories . UST Finder contains information about proximity of UST facilities and LUST sites to: surface and groundwater public drinking water protection areas; estimated number of private domestic wells and number of people living nearby; and flooding and wildfires.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/04/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 106
Source: Environmental Protection Agency
Telephone: 202-564-0394
Last EDR Contact: 11/09/2023
Next Scheduled EDR Contact: 02/19/2024
Data Release Frequency: Varies

UST FINDER RELEASE: UST Finder Releases Database
US EPA's UST Finder data is a national composite of leaking underground storage tanks. This data contains information about, and locations of, leaking underground storage tanks. Data was collected from state sources and standardized into a national profile by EPA's Office of Underground Storage Tanks, Office of Research and Development, and the Association of State and Territorial Solid Waste Management Officials.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/31/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 79
Source: Environmental Protecton Agency
Telephone: 202-564-0394
Last EDR Contact: 10/31/2023
Next Scheduled EDR Contact: 02/19/2024
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Floridia.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Floridia.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/10/2014
Number of Days to Update: 193

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Floridia.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALACHUA COUNTY:

FACILITY LIST ALACHUA: Facility List

List of all regulated facilities in Alachua County.

Date of Government Version: 09/13/2023
Date Data Arrived at EDR: 09/14/2023
Date Made Active in Reports: 12/04/2023
Number of Days to Update: 81

Source: Alachua County Environmental Protection Department
Telephone: 352-264-6800
Last EDR Contact: 12/12/2023
Next Scheduled EDR Contact: 04/01/2024
Data Release Frequency: Annually

BROWARD COUNTY:

AST BROWARD: Aboveground Storage Tanks

Aboveground storage tank locations in Broward County.

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/03/2021
Number of Days to Update: 78

Source: Broward County Environmental Protection Department
Telephone: 954-818-7509
Last EDR Contact: 11/15/2023
Next Scheduled EDR Contact: 03/04/2024
Data Release Frequency: Varies

UST BROWARD: Underground Storage Tanks

All known regulated storage tanks within Broward County, including those tanks that have been closed

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/03/2021
Number of Days to Update: 78

Source: Broward County Environmental Protection Department
Telephone: 954-818-7509
Last EDR Contact: 11/15/2023
Next Scheduled EDR Contact: 03/04/2024
Data Release Frequency: Varies

HILLSBOROUGH COUNTY:

LF HILLSBOROUGH: Hillsborough County LF
Hillsborough county landfill sites.

Date of Government Version: 10/02/2023
Date Data Arrived at EDR: 10/04/2023
Date Made Active in Reports: 12/19/2023
Number of Days to Update: 76

Source: Hillsborough County Environmental Protection Commission
Telephone: 813-627-2600
Last EDR Contact: 12/26/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Varies

MIAMI-DADE COUNTY:

DADE CO AP: Air Permit Sites
Facilities that release or have a potential to release pollutants.

Date of Government Version: 08/10/2023
Date Data Arrived at EDR: 08/10/2023
Date Made Active in Reports: 10/24/2023
Number of Days to Update: 75

Source: Department of Environmental Resources Management
Telephone: 305-372-6755
Last EDR Contact: 11/17/2023
Next Scheduled EDR Contact: 03/04/2024
Data Release Frequency: Semi-Annually

DADE CO AW: Agricultural Waste Listing
A listing of agricultural waste sites

Date of Government Version: 08/10/2023
Date Data Arrived at EDR: 08/10/2023
Date Made Active in Reports: 10/24/2023
Number of Days to Update: 75

Source: Miami-Dade County Division of Environmental Resources Management
Telephone: 305-372-6715
Last EDR Contact: 11/17/2023
Next Scheduled EDR Contact: 03/04/2024
Data Release Frequency: Varies

DADE CO LF: Miami Dade County Landfill Solid Waste Sites listing.
Miami Dade County Landfill Solid Waste Sites listing.

Date of Government Version: 02/24/2022
Date Data Arrived at EDR: 02/24/2022
Date Made Active in Reports: 05/19/2022
Number of Days to Update: 84

Source: Miami Dade County Environmental Resources Management
Telephone: 305-372-6789
Last EDR Contact: 01/11/2024
Next Scheduled EDR Contact: 03/04/2024
Data Release Frequency: Varies

DADE CO LW: Liquid Waste Transporter List
The Liquid Waste Transporter permit regulates the transportation of various types of liquid and solid waste, including hazardous waste, waste oil and oily waste waters, septic and grease trap waste, biomedical waste, spent radiator fluid, photo chemical waste, dry sewage sludge, and other types of non-hazardous industrial waste. The Liquid Waste Transporter permits needed to protect the environment and the public from improperly handled and transported waste.

Date of Government Version: 08/10/2023
Date Data Arrived at EDR: 08/10/2023
Date Made Active in Reports: 10/24/2023
Number of Days to Update: 75

Source: DERM
Telephone: 305-372-6755
Last EDR Contact: 11/17/2023
Next Scheduled EDR Contact: 03/04/2024
Data Release Frequency: Quarterly

DADE GTO: Grease Trap Sites
Any non-residential facility that discharges waste to a sanitary sewer.

Date of Government Version: 08/10/2023
Date Data Arrived at EDR: 08/10/2023
Date Made Active in Reports: 10/24/2023
Number of Days to Update: 75

Source: Dade County Dept. of Env. Resources Mgmt.
Telephone: 305-372-6508
Last EDR Contact: 11/17/2023
Next Scheduled EDR Contact: 03/04/2024
Data Release Frequency: Semi-Annually

DADE MOP: Marine Facilities Operating Permit

What is this permit used for? Miami-Dade County Ordinance 89-104 and Section 24-18 of the Code of Miami-Dade County require the following types of marine facilities to obtain annual operating permits from DERM: All recreational boat docking facilities with ten (10) or more boat slips, moorings, davit spaces, and vessel tie-up spaces. All boat storage facilities contiguous to tidal waters in Miami-Dade County with ten (10) or more dry storage spaces including boatyards and boat manufacturing facilities.

Date of Government Version: 08/10/2023
Date Data Arrived at EDR: 08/10/2023
Date Made Active in Reports: 10/24/2023
Number of Days to Update: 75
Source: DERM
Telephone: 305-372-3576
Last EDR Contact: 11/17/2023
Next Scheduled EDR Contact: 03/04/2024
Data Release Frequency: Quarterly

DADE MRE: Maimi River Enforcement

The Miami River Enforcement database files were created for facilities and in some instances vessels that were inspected by a workgroup within the Department that was identified as the Miami River Enforcement Group. The files do not all necessarily reflect enforcement cases and some were created for locations that were permitted by other Sections within the Department.

Date of Government Version: 06/05/2013
Date Data Arrived at EDR: 06/06/2013
Date Made Active in Reports: 08/06/2013
Number of Days to Update: 61
Source: DERM
Telephone: 305-372-3576
Last EDR Contact: 11/17/2023
Next Scheduled EDR Contact: 03/04/2024
Data Release Frequency: Quarterly

DADE_IWP: Industrial Waste Permit Sites

Facilities that either generate more than 25,000 of wastewater per day to sanitary sewers or are pre-defined by EPA.

Date of Government Version: 08/10/2023
Date Data Arrived at EDR: 08/10/2023
Date Made Active in Reports: 10/24/2023
Number of Days to Update: 75
Source: Department of Environmental Resources Management
Telephone: 305-372-6700
Last EDR Contact: 11/17/2023
Next Scheduled EDR Contact: 03/04/2024
Data Release Frequency: Semi-Annually

ENF: Enforcement Case Tracking System Sites

Enforcement cases monitored by the Dade County Department of Environmental Resources Management.

Date of Government Version: 08/21/2023
Date Data Arrived at EDR: 08/22/2023
Date Made Active in Reports: 11/06/2023
Number of Days to Update: 76
Source: Department of Environmental Resources Management
Telephone: 305-372-6755
Last EDR Contact: 11/20/2023
Next Scheduled EDR Contact: 03/04/2024
Data Release Frequency: Semi-Annually

SPILLS DADE: Fuel Spills Cases

DERM documents fuel spills of sites that are not in a state program.

Date of Government Version: 01/08/2009
Date Data Arrived at EDR: 01/13/2009
Date Made Active in Reports: 02/05/2009
Number of Days to Update: 23
Source: Department of Environmental Resources Management
Telephone: 305-372-6755
Last EDR Contact: 11/17/2023
Next Scheduled EDR Contact: 03/04/2024
Data Release Frequency: Semi-Annually

UST DADE: Storage Tanks

A listing of aboveground and underground storage tank site locations.

Date of Government Version: 04/05/2023
Date Data Arrived at EDR: 05/24/2023
Date Made Active in Reports: 08/11/2023
Number of Days to Update: 79
Source: Department of Environmental Resource Management
Telephone: 305-372-6700
Last EDR Contact: 11/22/2023
Next Scheduled EDR Contact: 03/04/2024
Data Release Frequency: Semi-Annually

PALM BEACH COUNTY:

LF PALM BEACH: Palm Beach County LF
Palm Beach County Inventory of Solid Waste Sites.

Date of Government Version: 09/01/2011
Date Data Arrived at EDR: 09/20/2011
Date Made Active in Reports: 10/10/2011
Number of Days to Update: 20

Source: Palm Beach County Solid Waste Authority
Telephone: 561-640-4000
Last EDR Contact: 12/07/2023
Next Scheduled EDR Contact: 03/18/2024
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 11/06/2023
Date Data Arrived at EDR: 11/07/2023
Date Made Active in Reports: 01/31/2024
Number of Days to Update: 85

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/06/2024
Next Scheduled EDR Contact: 05/20/2024
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 12/27/2023
Next Scheduled EDR Contact: 04/15/2024
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 11/30/2023
Date Made Active in Reports: 12/01/2023
Number of Days to Update: 1

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 01/26/2024
Next Scheduled EDR Contact: 05/06/2024
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 01/05/2024
Next Scheduled EDR Contact: 04/22/2024
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 11/09/2022
Next Scheduled EDR Contact: 02/26/2024
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 11/29/2023
Next Scheduled EDR Contact: 03/18/2024
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Department of Children & Families
Source: Provider Information
Telephone: 850-488-4900

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory
Source: Department of Environmental Protection
Telephone: 850-245-8238

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

NONA TOWNHOMES
1820, 1860 PUFFIN ROAD
SAINT CLOUD, FL 34771

TARGET PROPERTY COORDINATES

Latitude (North):	28.251185 - 28° 15' 4.27''
Longitude (West):	81.236697 - 81° 14' 12.11''
Universal Tranverse Mercator:	Zone 17
UTM X (Meters):	476781.1
UTM Y (Meters):	3124877.8
Elevation:	74 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	17090156 NARCOOSSEE, FL
Version Date:	2021
Southeast Map:	20024088 ASHTON, FL
Version Date:	2021
Southwest Map:	17175863 SAINT CLOUD SOUTH, FL
Version Date:	2021
Northwest Map:	20024106 SAINT CLOUD NORTH, FL
Version Date:	2021

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

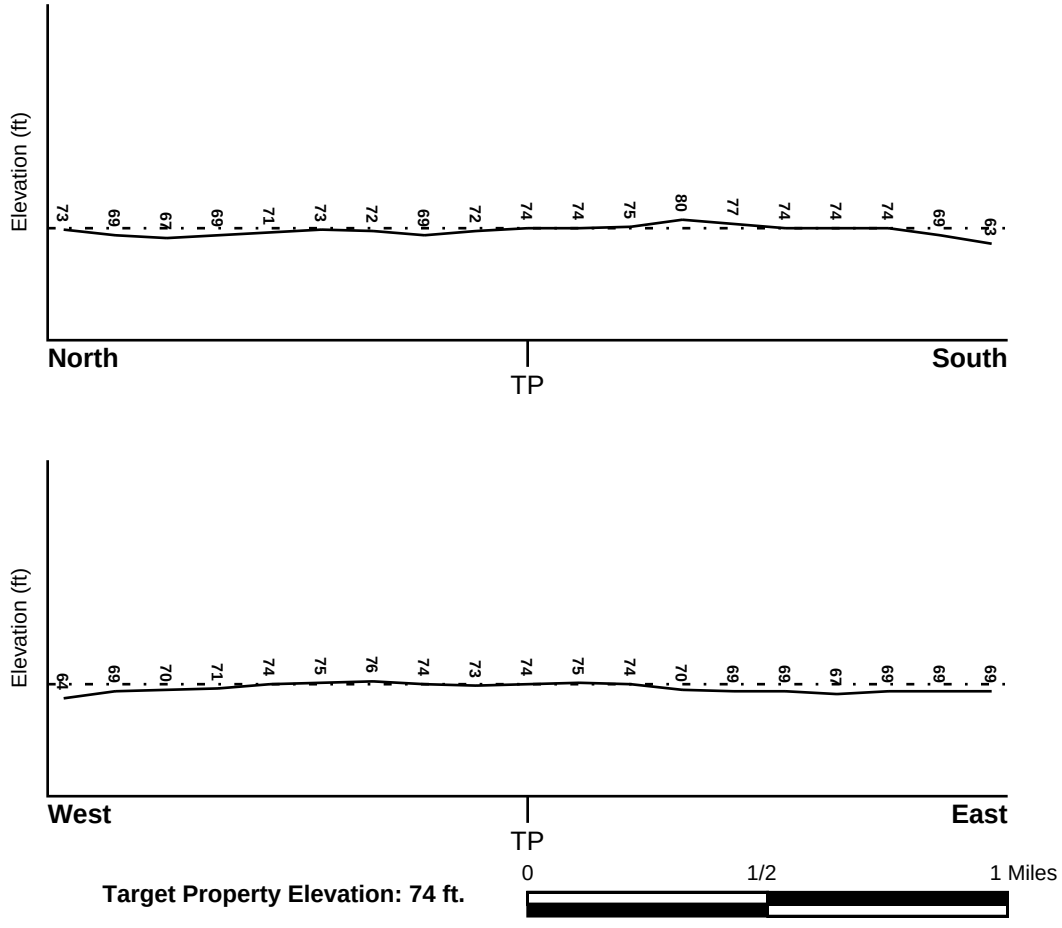
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General North

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
12095C0675F	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
12095C0650F	FEMA FIRM Flood data
12097C0257G	FEMA FIRM Flood data
12097C0280G	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
NARCOOSSEE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Cenozoic
System:	Quaternary
Series:	Pleistocene
Code:	Qp *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	MYAKKA
Soil Surface Texture:	fine sand
Hydrologic Group:	Class B/D - Drained/undrained hydrology class of soils that can be drained and are classified.
Soil Drainage Class:	Poorly. Soils may have a saturated zone, a layer of low hydraulic conductivity, or seepage. Depth to water table is less than 1 foot.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: HIGH

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	6 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand.	Max: 20.00 Min: 6.00	Max: 6.50 Min: 3.60
2	6 inches	20 inches	sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand.	Max: 20.00 Min: 6.00	Max: 6.50 Min: 3.60
3	20 inches	36 inches	sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 6.00 Min: 0.60	Max: 6.50 Min: 3.60
4	36 inches	80 inches	sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand.	Max: 20.00 Min: 6.00	Max: 6.50 Min: 3.60

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: No Other Soil Types

Surficial Soil Types: No Other Soil Types

Shallow Soil Types: fine sand

Deeper Soil Types: coarse sand
fine sand

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
F12	USGS40000248048	1/4 - 1/2 Mile SSE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
J24	FL3494323	1/2 - 1 Mile SSW

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	FLSA13000066298	1/8 - 1/4 Mile NE
A2	FLSA13000055285	1/4 - 1/2 Mile ESE
3	FLSO13020426007	1/4 - 1/2 Mile NNE
B4	FLSA13000007514	1/4 - 1/2 Mile South
C5	FLSA13000055286	1/4 - 1/2 Mile SE
B6	FLSA13000007513	1/4 - 1/2 Mile SSE
D7	FLSO13020461969	1/4 - 1/2 Mile SSW
A8	FLSA13000114154	1/4 - 1/2 Mile ESE
C9	FLSA13000055288	1/4 - 1/2 Mile SE
D10	FLSA13000022244	1/4 - 1/2 Mile SW
E11	FLSA13000011931	1/4 - 1/2 Mile SW
G13	FLSA13000055287	1/4 - 1/2 Mile SE
F14	FLSA13000014888	1/4 - 1/2 Mile SSE
F15	FLDGW7000002354	1/4 - 1/2 Mile SSE
E16	FLSA13000055301	1/4 - 1/2 Mile SW
H17	FLSA13000055268	1/4 - 1/2 Mile SE
G18	FLSO13020474361	1/4 - 1/2 Mile SE
H19	FLSA13000018681	1/4 - 1/2 Mile SE
H20	FLSA13000106514	1/4 - 1/2 Mile SE
H21	FLSA13000022336	1/2 - 1 Mile SE
I22	FLSA13000007508	1/2 - 1 Mile SW
H23	FLSO13020471953	1/2 - 1 Mile SE
J25	FLSA13000110731	1/2 - 1 Mile SSW
J26	FLSA13000074333	1/2 - 1 Mile SSW
J27	FLSO13020642061	1/2 - 1 Mile SSW

STATE DATABASE WELL INFORMATION

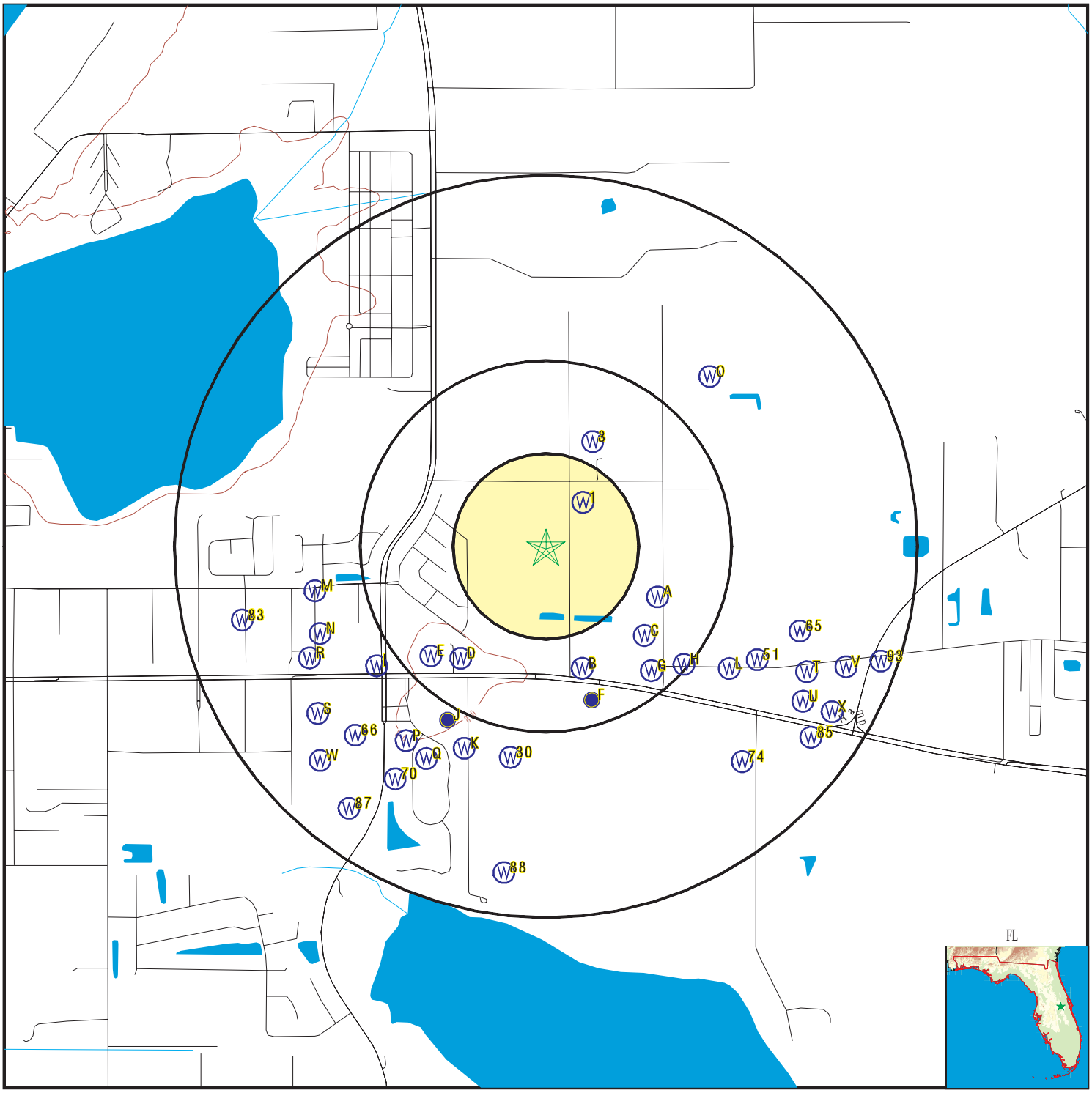
MAP ID	WELL ID	LOCATION FROM TP
K28	FLSA13000091473	1/2 - 1 Mile SSW
L29	FLSA13000016607	1/2 - 1 Mile SE
30	FLSO13020400681	1/2 - 1 Mile South
I31	FLSA13000007381	1/2 - 1 Mile SW
I32	FLSA13000011932	1/2 - 1 Mile SW
L33	FLSA13000055269	1/2 - 1 Mile SE
K34	FLSA13000110784	1/2 - 1 Mile SSW
K35	FLSA13000091470	1/2 - 1 Mile SSW
L36	FLSA13000055319	1/2 - 1 Mile ESE
M37	FLSA13000055299	1/2 - 1 Mile West
L38	FLSA13000022279	1/2 - 1 Mile ESE
L39	FLSA13000025683	1/2 - 1 Mile ESE
K40	FLSA13000019030	1/2 - 1 Mile SSW
N41	FLSA13000074332	1/2 - 1 Mile WSW
O42	FLSO13020612190	1/2 - 1 Mile NE
P43	FLSA13000091472	1/2 - 1 Mile SW
O44	FLSO13020635572	1/2 - 1 Mile NE
N45	FLSA13000013888	1/2 - 1 Mile WSW
Q46	FLSA13000091469	1/2 - 1 Mile SSW
P47	FLSA13000091471	1/2 - 1 Mile SSW
P48	FLSA13000011930	1/2 - 1 Mile SW
Q49	FLSA13000091474	1/2 - 1 Mile SSW
M50	FLSA13000068049	1/2 - 1 Mile West
51	FLSA13000090159	1/2 - 1 Mile ESE
Q52	FLSA13000110783	1/2 - 1 Mile SSW
N53	FLSA13000068036	1/2 - 1 Mile WSW
M54	FLSA13000068050	1/2 - 1 Mile WSW
Q55	FLSA13000110785	1/2 - 1 Mile SSW
N56	FLSA13000011933	1/2 - 1 Mile WSW
N57	FLSA13000011910	1/2 - 1 Mile WSW
P58	FLSA13000016555	1/2 - 1 Mile SW
R59	FLSA13000068037	1/2 - 1 Mile WSW
R60	FLSA13000011795	1/2 - 1 Mile WSW
N61	FLSA13000074331	1/2 - 1 Mile WSW
Q62	FLSA13000066541	1/2 - 1 Mile SSW
R63	FLSA13000068038	1/2 - 1 Mile WSW
R64	FLSA13000074334	1/2 - 1 Mile WSW
65	FLSA13000025687	1/2 - 1 Mile ESE
66	FLSO13020629448	1/2 - 1 Mile SW
R67	FLSA13000074335	1/2 - 1 Mile WSW
R68	FLSA13000023637	1/2 - 1 Mile WSW
S69	FLSA13000011929	1/2 - 1 Mile SW
70	FLSA13000090228	1/2 - 1 Mile SSW
T71	FLSA13000025686	1/2 - 1 Mile ESE
T72	FLSA13000090157	1/2 - 1 Mile ESE
T73	FLSA13000090164	1/2 - 1 Mile ESE
74	FLSO13020573013	1/2 - 1 Mile SE
S75	FLSO13020638230	1/2 - 1 Mile SW
T76	FLSA13000090160	1/2 - 1 Mile ESE
U77	FLSA13000090161	1/2 - 1 Mile ESE
U78	FLSA13000025668	1/2 - 1 Mile ESE
T79	FLSA13000025685	1/2 - 1 Mile ESE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
V80	FLSA13000090163	1/2 - 1 Mile ESE
W81	FLSA13000055261	1/2 - 1 Mile SW
W82	FLSA13000055262	1/2 - 1 Mile SW
83	FLSA13000023638	1/2 - 1 Mile WSW
V84	FLSA13000025684	1/2 - 1 Mile ESE
85	FLSA13000025669	1/2 - 1 Mile SE
V86	FLSA13000025671	1/2 - 1 Mile ESE
87	FLSO13020640334	1/2 - 1 Mile SW
88	FLSO13020645214	1/2 - 1 Mile South
V89	FLSA13000055318	1/2 - 1 Mile ESE
V90	FLSA13000025670	1/2 - 1 Mile ESE
X91	FLSA13000007509	1/2 - 1 Mile ESE
X92	FLPUB1100007349	1/2 - 1 Mile ESE
93	FLSA13000008815	1/2 - 1 Mile ESE

PHYSICAL SETTING SOURCE MAP - 7564488.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells
- Sink holes

SITE NAME:	Nona Townhomes	CLIENT:	SCS Engineers
ADDRESS:	1820, 1860 Puffin Road Saint Cloud FL 34771	CONTACT:	Claire Fraley
LAT/LONG:	28.251185 / 81.236697	INQUIRY #:	7564488.2s
		DATE:	February 08, 2024 7:51 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

1
NE
1/8 - 1/4 Mile
Higher

FL WELLS **FLSA13000066298**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	380
Casing Length (ft):	231	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	Not Reported	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

A2
ESE
1/4 - 1/2 Mile
Higher

FL WELLS **FLSA13000055285**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	Not Reported	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	0
Permit #:	Not Reported	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	490004101
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

3
NNE
1/4 - 1/2 Mile
Higher

FL WELLS **FLSO13020426007**

WELLS - SO:

Permit #:	49-00013-W	Application #:	100927-32
Permit Type:	IND	Project Name:	NO 2 GROVE
Land Use:	Agriculture	Acres Served:	76
Facility ID:	24243	Facility Type:	WELL
Facility Name:	Well No. 1	Pump Type:	Diesel Turbine
Pump Diameter (in):	0	Well Diameter (in):	8
Pump Capacity:	1200	Intake Depth (ft):	50
Intake Elevation (ft):	0	Well Depth (ft):	548
Casing Depth (ft):	302	Well Use:	Primary
Facility Status:	Existing	Facility Type:	IRR
Source:	Floridan Aquifer System	Permitted:	Yes

B4
South
1/4 - 1/2 Mile
Higher

FL WELLS **FLSA13000007514**

WELLS - SUPER ACT:

Well Type:	Limited Use PWS	Well Status:	ACTIVE

casing Material:	Galvanized	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

C5
SE **FL WELLS** **FLSA13000055286**
1/4 - 1/2 Mile
Higher

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	Not Reported	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	0
Permit #:	Not Reported	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	490004201
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

B6
SSE **FL WELLS** **FLSA13000007513**
1/4 - 1/2 Mile
Higher

WELLS - SUPER ACT:

Well Type:	Non-Community PWS	Well Status:	ACTIVE
casing Material:	Galvanized	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	2
Permit #:	3494347	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	490019501
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	10800

D7
SSW **FL WELLS** **FLSO13020461969**
1/4 - 1/2 Mile
Higher

WELLS - SO:

Permit #:	49-01081-W	Application #:	001103-14
Permit Type:	GP	Project Name:	BLUE DIAMOND POOLS
Land Use:	Landscape	Acres Served:	.75
Facility ID:	105382	Facility Type:	WELL
Facility Name:	Well 1	Pump Type:	Submersible
Pump Diameter (in):	0	Well Diameter (in):	4
Pump Capacity:	25	Intake Depth (ft):	0
Intake Elevation (ft):	0	Well Depth (ft):	320
Casing Depth (ft):	221	Well Use:	Primary
Facility Status:	Proposed	Facility Type:	IRR
Source:	Floridan Aquifer System	Permitted:	Yes

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A8
ESE **FL WELLS** **FLSA13000114154**
1/4 - 1/2 Mile
Higher

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	Not Reported	WSRP ID:	480398401
WSRP Action:	CORRESPONDING	Potable Status:	POTABLE
Resident Type:	OPERATOR	PWS Design:	Not Reported

C9
SE **FL WELLS** **FLSA13000055288**
1/4 - 1/2 Mile
Higher

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	Not Reported	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	0
Permit #:	Not Reported	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	490004401
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

D10
SW **FL WELLS** **FLSA13000022244**
1/4 - 1/2 Mile
Higher

WELLS - SUPER ACT:

Well Type:	Limited Use PWS	Well Status:	ACTIVE
casing Material:	BLACK STEEL	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	4
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

E11
SW **FL WELLS** **FLSA13000011931**
1/4 - 1/2 Mile
Higher

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	Not Reported

WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

F12
SSE **FED USGS** **USGS40000248048**
1/4 - 1/2 Mile
Higher

Organization ID:	USGS-FL	Organization Name:	USGS Florida Water Science Center
Monitor Location:	ASHTON FORESTRY TOWER WELL AT ASHTON, FL		
Type:	Well	Description:	MP ELV=75.99
HUC:	03090101	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Floridan aquifer system
Formation Type:	Floridan Aquifer System	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	400
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	117	Level reading date:	2005-01-24
Feet below surface:	Not Reported	Feet to sea level:	47.04
Note:	Not Reported		

Level reading date:	2004-09-28	Feet below surface:	Not Reported
Feet to sea level:	48.98	Note:	Not Reported
Level reading date:	2004-09-20	Feet below surface:	Not Reported
Feet to sea level:	48.38	Note:	Not Reported
Level reading date:	2004-08-23	Feet below surface:	Not Reported
Feet to sea level:	46.61	Note:	Not Reported
Level reading date:	2004-07-26	Feet below surface:	Not Reported
Feet to sea level:	44.72	Note:	Not Reported
Level reading date:	2004-06-28	Feet below surface:	Not Reported
Feet to sea level:	43.70	Note:	Not Reported
Level reading date:	2004-05-24	Feet below surface:	Not Reported
Feet to sea level:	42.40	Note:	Not Reported
Level reading date:	2004-05-17	Feet below surface:	Not Reported
Feet to sea level:	43.09	Note:	Not Reported
Level reading date:	2004-04-26	Feet below surface:	Not Reported
Feet to sea level:	43.75	Note:	Not Reported
Level reading date:	2004-03-29	Feet below surface:	Not Reported
Feet to sea level:	46.02	Note:	Not Reported
Level reading date:	2004-02-23	Feet below surface:	Not Reported
Feet to sea level:	46.91	Note:	Not Reported
Level reading date:	2004-01-26	Feet below surface:	Not Reported
Feet to sea level:	46.70	Note:	Not Reported
Level reading date:	2003-12-29	Feet below surface:	Not Reported
Feet to sea level:	46.87	Note:	Not Reported
Level reading date:	2003-11-24	Feet below surface:	Not Reported

Feet to sea level:	47.11	Note:	Not Reported
Level reading date:	2003-10-28	Feet below surface:	Not Reported
Feet to sea level:	46.75	Note:	Not Reported
Level reading date:	2003-09-23	Feet below surface:	Not Reported
Feet to sea level:	47.85	Note:	Not Reported
Level reading date:	2003-09-16	Feet below surface:	Not Reported
Feet to sea level:	48.00	Note:	Not Reported
Level reading date:	2003-08-26	Feet below surface:	Not Reported
Feet to sea level:	48.31	Note:	Not Reported
Level reading date:	2003-07-29	Feet below surface:	Not Reported
Feet to sea level:	47.11	Note:	Not Reported
Level reading date:	2003-06-24	Feet below surface:	Not Reported
Feet to sea level:	46.39	Note:	Not Reported
Level reading date:	2003-05-28	Feet below surface:	Not Reported
Feet to sea level:	44.81	Note:	Not Reported
Level reading date:	2003-05-19	Feet below surface:	Not Reported
Feet to sea level:	44.15	Note:	Not Reported
Level reading date:	2003-04-29	Feet below surface:	Not Reported
Feet to sea level:	46.11	Note:	Not Reported
Level reading date:	2003-03-25	Feet below surface:	Not Reported
Feet to sea level:	47.85	Note:	Not Reported
Level reading date:	2003-02-25	Feet below surface:	Not Reported
Feet to sea level:	47.09	Note:	Not Reported
Level reading date:	2003-01-28	Feet below surface:	Not Reported
Feet to sea level:	46.74	Note:	Not Reported
Level reading date:	2002-12-30	Feet below surface:	Not Reported
Feet to sea level:	47.85	Note:	Not Reported
Level reading date:	2002-11-22	Feet below surface:	Not Reported
Feet to sea level:	46.46	Note:	Not Reported
Level reading date:	2002-10-28	Feet below surface:	Not Reported
Feet to sea level:	46.09	Note:	Not Reported
Level reading date:	2002-09-16	Feet below surface:	Not Reported
Feet to sea level:	46.98	Note:	Not Reported
Level reading date:	2002-08-27	Feet below surface:	Not Reported
Feet to sea level:	46.89	Note:	Not Reported
Level reading date:	2002-07-30	Feet below surface:	Not Reported
Feet to sea level:	46.07	Note:	Not Reported
Level reading date:	2002-06-22	Feet below surface:	Not Reported
Feet to sea level:	43.57	Note:	Not Reported
Level reading date:	2002-05-29	Feet below surface:	Not Reported
Feet to sea level:	40.67	Note:	Not Reported

Level reading date:	2002-05-13	Feet below surface:	Not Reported
Feet to sea level:	39.75	Note:	Not Reported
Level reading date:	2002-04-23	Feet below surface:	Not Reported
Feet to sea level:	42.20	Note:	Not Reported
Level reading date:	2002-03-26	Feet below surface:	Not Reported
Feet to sea level:	43.66	Note:	Not Reported
Level reading date:	2002-02-26	Feet below surface:	Not Reported
Feet to sea level:	46.08	Note:	Not Reported
Level reading date:	2002-01-29	Feet below surface:	Not Reported
Feet to sea level:	45.73	Note:	Not Reported
Level reading date:	2001-12-19	Feet below surface:	Not Reported
Feet to sea level:	46.04	Note:	Not Reported
Level reading date:	2001-11-27	Feet below surface:	Not Reported
Feet to sea level:	46.80	Note:	Not Reported
Level reading date:	2001-10-25	Feet below surface:	Not Reported
Feet to sea level:	46.82	Note:	Not Reported
Level reading date:	2001-09-24	Feet below surface:	Not Reported
Feet to sea level:	46.66	Note:	Not Reported
Level reading date:	2001-05-15	Feet below surface:	Not Reported
Feet to sea level:	40.63	Note:	Not Reported
Level reading date:	2000-09-11	Feet below surface:	Not Reported
Feet to sea level:	43.92	Note:	Not Reported
Level reading date:	2000-05-15	Feet below surface:	Not Reported
Feet to sea level:	39.54	Note:	Not Reported
Level reading date:	1999-09-20	Feet below surface:	Not Reported
Feet to sea level:	46.05	Note:	Not Reported
Level reading date:	1999-05-10	Feet below surface:	Not Reported
Feet to sea level:	41.72	Note:	Not Reported
Level reading date:	1998-09-15	Feet below surface:	Not Reported
Feet to sea level:	45.59	Note:	Not Reported
Level reading date:	1998-05-12	Feet below surface:	Not Reported
Feet to sea level:	45.40	Note:	Not Reported
Level reading date:	1997-09-08	Feet below surface:	Not Reported
Feet to sea level:	47.73	Note:	Not Reported
Level reading date:	1997-05-12	Feet below surface:	Not Reported
Feet to sea level:	45.29	Note:	Not Reported
Level reading date:	1996-09-09	Feet below surface:	Not Reported
Feet to sea level:	46.76	Note:	Not Reported
Level reading date:	1996-05-13	Feet below surface:	Not Reported
Feet to sea level:	45.64	Note:	Not Reported
Level reading date:	1995-09-11	Feet below surface:	Not Reported
Feet to sea level:	48.17	Note:	Not Reported

Level reading date:	1995-05-15	Feet below surface:	Not Reported
Feet to sea level:	45.80	Note:	Not Reported
Level reading date:	1994-09-12	Feet below surface:	Not Reported
Feet to sea level:	48.43	Note:	Not Reported
Level reading date:	1994-08-15	Feet below surface:	Not Reported
Feet to sea level:	47.87	Note:	Not Reported
Level reading date:	1994-07-21	Feet below surface:	Not Reported
Feet to sea level:	46.93	Note:	Not Reported
Level reading date:	1994-06-16	Feet below surface:	Not Reported
Feet to sea level:	46.35	Note:	Not Reported
Level reading date:	1994-05-10	Feet below surface:	Not Reported
Feet to sea level:	45.51	Note:	Not Reported
Level reading date:	1994-04-26	Feet below surface:	Not Reported
Feet to sea level:	45.36	Note:	Not Reported
Level reading date:	1994-03-24	Feet below surface:	Not Reported
Feet to sea level:	46.20	Note:	Not Reported
Level reading date:	1994-02-17	Feet below surface:	Not Reported
Feet to sea level:	47.50	Note:	Not Reported
Level reading date:	1994-01-13	Feet below surface:	Not Reported
Feet to sea level:	46.53	Note:	Not Reported
Level reading date:	1993-12-13	Feet below surface:	Not Reported
Feet to sea level:	46.31	Note:	Not Reported
Level reading date:	1993-11-18	Feet below surface:	Not Reported
Feet to sea level:	46.78	Note:	Not Reported
Level reading date:	1993-10-21	Feet below surface:	Not Reported
Feet to sea level:	47.11	Note:	Not Reported
Level reading date:	1993-09-23	Feet below surface:	Not Reported
Feet to sea level:	46.14	Note:	Not Reported
Level reading date:	1993-08-18	Feet below surface:	Not Reported
Feet to sea level:	44.13	Note:	Not Reported
Level reading date:	1993-06-18	Feet below surface:	Not Reported
Feet to sea level:	44.77	Note:	Not Reported
Level reading date:	1993-05-14	Feet below surface:	Not Reported
Feet to sea level:	45.89	Note:	Not Reported
Level reading date:	1993-04-16	Feet below surface:	Not Reported
Feet to sea level:	48.54	Note:	Not Reported
Level reading date:	1993-03-18	Feet below surface:	Not Reported
Feet to sea level:	48.44	Note:	Not Reported
Level reading date:	1993-02-09	Feet below surface:	Not Reported
Feet to sea level:	48.95	Note:	Not Reported
Level reading date:	1992-09-15	Feet below surface:	Not Reported
Feet to sea level:	47.70	Note:	Not Reported

Level reading date:	1992-05-12	Feet below surface:	Not Reported
Feet to sea level:	44.92	Note:	Not Reported
Level reading date:	1991-09-09	Feet below surface:	Not Reported
Feet to sea level:	48.49	Note:	Not Reported
Level reading date:	1991-05-13	Feet below surface:	Not Reported
Feet to sea level:	45.66	Note:	Not Reported
Level reading date:	1990-09-12	Feet below surface:	Not Reported
Feet to sea level:	45.63	Note:	Not Reported
Level reading date:	1990-05-16	Feet below surface:	Not Reported
Feet to sea level:	41.59	Note:	Not Reported
Level reading date:	1989-09-13	Feet below surface:	Not Reported
Feet to sea level:	46.06	Note:	Not Reported
Level reading date:	1989-05-10	Feet below surface:	Not Reported
Feet to sea level:	44.02	Note:	Not Reported
Level reading date:	1988-09-16	Feet below surface:	Not Reported
Feet to sea level:	47.84	Note:	Not Reported
Level reading date:	1988-05-11	Feet below surface:	Not Reported
Feet to sea level:	44.10	Note:	Not Reported
Level reading date:	1987-09-08	Feet below surface:	Not Reported
Feet to sea level:	45.51	Note:	Not Reported
Level reading date:	1987-05-21	Feet below surface:	Not Reported
Feet to sea level:	45.50	Note:	Not Reported
Level reading date:	1986-09-16	Feet below surface:	Not Reported
Feet to sea level:	47.70	Note:	Not Reported
Level reading date:	1986-05-14	Feet below surface:	Not Reported
Feet to sea level:	46.92	Note:	Not Reported
Level reading date:	1985-09-10	Feet below surface:	Not Reported
Feet to sea level:	47.87	Note:	Not Reported
Level reading date:	1985-05-13	Feet below surface:	Not Reported
Feet to sea level:	42.71	Note:	Not Reported
Level reading date:	1984-09-14	Feet below surface:	Not Reported
Feet to sea level:	48.32	Note:	Not Reported
Level reading date:	1984-05-18	Feet below surface:	Not Reported
Feet to sea level:	44.90	Note:	Not Reported
Level reading date:	1983-09-12	Feet below surface:	Not Reported
Feet to sea level:	48.18	Note:	Not Reported
Level reading date:	1983-05-20	Feet below surface:	Not Reported
Feet to sea level:	46.27	Note:	Not Reported
Level reading date:	1982-09-16	Feet below surface:	Not Reported
Feet to sea level:	48.90	Note:	Not Reported
Level reading date:	1982-05-14	Feet below surface:	Not Reported
Feet to sea level:	45.41	Note:	Not Reported

Level reading date:	1981-09-24	Feet below surface:	Not Reported
Feet to sea level:	46.57	Note:	Not Reported
Level reading date:	1981-05-14	Feet below surface:	Not Reported
Feet to sea level:	41.75	Note:	Not Reported
Level reading date:	1980-09-17	Feet below surface:	Not Reported
Feet to sea level:	46.78	Note:	Not Reported
Level reading date:	1979-11-16	Feet below surface:	Not Reported
Feet to sea level:	48.51	Note:	Not Reported
Level reading date:	1979-09-13	Feet below surface:	Not Reported
Feet to sea level:	48.82	Note:	Not Reported
Level reading date:	1979-05-08	Feet below surface:	Not Reported
Feet to sea level:	45.27	Note:	Not Reported
Level reading date:	1979-03-22	Feet below surface:	Not Reported
Feet to sea level:	48.21	Note:	Not Reported
Level reading date:	1978-12-06	Feet below surface:	Not Reported
Feet to sea level:	46.82	Note:	Not Reported
Level reading date:	1978-10-03	Feet below surface:	Not Reported
Feet to sea level:	48.47	Note:	Not Reported
Level reading date:	1978-05-02	Feet below surface:	Not Reported
Feet to sea level:	43.68	Note:	Not Reported
Level reading date:	1977-09-19	Feet below surface:	Not Reported
Feet to sea level:	47.62	Note:	Not Reported
Level reading date:	1977-05-04	Feet below surface:	Not Reported
Feet to sea level:	42.83	Note:	Not Reported
Level reading date:	1976-05-12	Feet below surface:	Not Reported
Feet to sea level:	42.91	Note:	Not Reported
Level reading date:	1976-05-12	Feet below surface:	32.03
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-03-11	Feet below surface:	Not Reported
Feet to sea level:	45.43	Note:	Not Reported
Level reading date:	1974-01-29	Feet below surface:	Not Reported
Feet to sea level:	47.53	Note:	Not Reported
Level reading date:	1974-01-04	Feet below surface:	Not Reported
Feet to sea level:	48.39	Note:	Not Reported
Level reading date:	1973-11-05	Feet below surface:	Not Reported
Feet to sea level:	50.10	Note:	Not Reported
Level reading date:	1973-09-27	Feet below surface:	Not Reported
Feet to sea level:	49.52	Note:	Not Reported
Level reading date:	1973-05-04	Feet below surface:	Not Reported
Feet to sea level:	47.23	Note:	Not Reported

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

G13
SE **FL WELLS** **FLSA13000055287**
1/4 - 1/2 Mile
Higher

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	Not Reported	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	0
Permit #:	Not Reported	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	490004301
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

F14
SSE **FL WELLS** **FLSA13000014888**
1/4 - 1/2 Mile
Higher

WELLS - SUPER ACT:

Well Type:	Limited Use PWS	Well Status:	ACTIVE
casing Material:	Galvanized	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	4
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

F15
SSE **FL WELLS** **FLDGW7000002354**
1/4 - 1/2 Mile
Higher

Database:	DEP GWIS - Generalized Water Information System Well Data (FDEP)		
Station ID:	5592	Station Name:	2.8144E+14
Station Alias:	Not Reported	Waterbody:	FLORIDAN AQUIFER SYSTEM
Water Source:	CONFINED AQUIFER	Well Type:	PRIVATE DRINKING WATER WELL
Well Status:	NON-FLOWING,ACTIVELY PUMPED		
Drill Date:	27-OCT-71	Total Depth (ft):	394
Casing Depth (ft):	276	Depth Screen Begins (ft):	276
Depth Screen Ends (ft):	394	Casing Diameter (in):	4
Casing Material:	GALVANIZED IRON OR GALVANIZED STEEL		

E16
SW **FL WELLS** **FLSA13000055301**
1/4 - 1/2 Mile
Higher

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ERROR
casing Material:	Not Reported	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	0
Permit #:	Not Reported	Sanitary Seal:	Not Reported

Large PWS Well:	0	WSRP ID:	490005801
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

H17
SE
1/4 - 1/2 Mile
Higher

FL WELLS **FLSA13000055268**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	Not Reported	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	0
Permit #:	Not Reported	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	490002401
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

G18
SE
1/4 - 1/2 Mile
Higher

FL WELLS **FLSO13020474361**

WELLS - SO:

Permit #:	49-01067-W	Application #:	200930-3
Permit Type:	GP	Project Name:	HEARTCRY CHAPEL
Land Use:	Public Water Supply	Acres Served:	2
Facility ID:	101319	Facility Type:	WELL
Facility Name:	WELL 1	Pump Type:	Submersible
Pump Diameter (in):	0	Well Diameter (in):	3
Pump Capacity:	30	Intake Depth (ft):	0
Intake Elevation (ft):	0	Well Depth (ft):	350
Casing Depth (ft):	260	Well Use:	Primary
Facility Status:	Existing	Facility Type:	Public Water Supply
Source:	Upper Floridan Aquifer	Permitted:	Yes

H19
SE
1/4 - 1/2 Mile
Higher

FL WELLS **FLSA13000018681**

WELLS - SUPER ACT:

Well Type:	Non-Community PWS	Well Status:	ACTIVE
casing Material:	Galvanized	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	4
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	490010901
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

H20
SE
1/4 - 1/2 Mile
Higher

FL WELLS **FLSA13000106514**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	Not Reported	Well Depth (ft):	0
Casing Length (ft):	231	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	YES
Large PWS Well:	Not Reported	WSRP ID:	490016101
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	RESIDENT	PWS Design:	Not Reported

H21
SE
1/2 - 1 Mile
Higher

FL WELLS **FLSA13000022336**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	PVC	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

I22
SW
1/2 - 1 Mile
Higher

FL WELLS **FLSA13000007508**

WELLS - SUPER ACT:

Well Type:	Non-Community PWS	Well Status:	ABANDONED
casing Material:	Not Reported	Well Depth (ft):	0
Casing Length (ft):	Not Reported	Casing Diameter (ft):	Not Reported
Permit #:	3494357	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	NON-POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

H23
SE
1/2 - 1 Mile
Higher

FL WELLS **FLSO13020471953**

WELLS - SO:

Permit #:	49-01223-W	Application #:	020919-13
Permit Type:	GP	Project Name:	ROCKERS LOCKERS II
Land Use:	Landscape	Acres Served:	2.64
Facility ID:	123359	Facility Type:	WELL
Facility Name:	Well No. 1	Pump Type:	Submersible

Pump Diameter (in):	0	Well Diameter (in):	4
Pump Capacity:	42	Intake Depth (ft):	0
Intake Elevation (ft):	0	Well Depth (ft):	330
Casing Depth (ft):	0	Well Use:	Primary
Facility Status:	Proposed	Facility Type:	IRR
Source:	Floridan Aquifer System	Permitted:	Yes

J24
SSW
1/2 - 1 Mile
Higher

FRDS PWS **FL3494323**

Epa region:	04	State:	FL
Pwsid:	FL3494323	Pwsname:	FIRST FEDERAL/OSCEOLA
Cityserved:	Not Reported	Stateserved:	FL
Zipserved:	Not Reported	Fipscounty:	12097
Status:	Closed	Retpopsrvd:	40
Pwssvcconn:	1	Psource longname:	Groundwater
Pwstype:	NTNCWS	Owner:	Private
Contact:	FIRST FEDERAL/OSCEOLA	Contactorgname:	Not Reported
Contactphone:	407-957-7425	Contactaddress1:	Not Reported
Contactaddress2:	2013 LIVE OAK BLVD	Contactcity:	ST CLOUD
Contactstate:	FL	Contactzip:	34771
Pwsactivitycode:	I		
Pwsid:	FL3494323	Facid:	1
Facname:	PLANT ID = 01 SOURCE ID = 000		
Factype:	Treatment_plant	Facactivitycode:	I
Trtobjective:	disinfection	Trtprocess:	hypochlorination, post
Factypecode:	TP		
Pwsid:	FL3494323	Facid:	1
Facname:	PLANT ID = 01 SOURCE ID = 000		
Factype:	Treatment_plant	Facactivitycode:	I
Trtobjective:	iron removal	Trtprocess:	filtration, pressure sand
Factypecode:	TP		
Pwsid:	FL3494323	Facid:	1
Facname:	PLANT ID = 01 SOURCE ID = 000		
Factype:	Treatment_plant	Facactivitycode:	I
Trtobjective:	inorganics removal	Trtprocess:	ion exchange
Factypecode:	TP		
PWS ID:	FL3494323	PWS type:	System Owner/Responsible Party
PWS name:	FIRST FEDERAL SAVINGS & LOAN		
PWS address:	Not Reported	PWS city:	ST CLOUD
PWS state:	FL	PWS zip:	34770
PWS ID:	FL3494323	Activity status:	Active
Date system activated:	Not Reported	Date system deactivated:	Not Reported
Retail population:	00000040	System name:	FIRST FEDERAL/OSCEOLA
System address:	Not Reported	System address:	2013 LIVE OAK BLVD
System city:	ST CLOUD	System state:	FL
System zip:	34771		
Population served:	Under 101 Persons	Treatment:	Treated
Latitude:	281440	Longitude:	0811430
Latitude:	281440	Longitude:	0811430

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

J25
SSW
1/2 - 1 Mile
Higher

FL WELLS **FLSA13000110731**

WELLS - SUPER ACT:

Well Type:	Limited Use PWS	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	400
Casing Length (ft):	280	Casing Diameter (ft):	4
Permit #:	Not Reported	Sanitary Seal:	yes
Large PWS Well:	Not Reported	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	owner	PWS Design:	Not Reported

J26
SSW
1/2 - 1 Mile
Higher

FL WELLS **FLSA13000074333**

WELLS - SUPER ACT:

Well Type:	Limited Use PWS	Well Status:	ABANDONED
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	4
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	490029701
WSRP Action:	UNFILTERED	Potable Status:	NON-POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

J27
SSW
1/2 - 1 Mile
Higher

FL WELLS **FLSO13020642061**

WELLS - SO:

Permit #:	49-02746-W	Application #:	190529-2
Permit Type:	GP	Project Name:	DANLEY INDUSTRIES INC
Land Use:	Public Water Supply	Acres Served:	2.27
Facility ID:	281850	Facility Type:	WELL
Facility Name:	Well 1	Pump Type:	Submersible
Pump Diameter (in):	0	Well Diameter (in):	4
Pump Capacity:	75	Intake Depth (ft):	2
Intake Elevation (ft):	84	Well Depth (ft):	400
Casing Depth (ft):	275	Well Use:	Primary
Facility Status:	Proposed	Facility Type:	Public Water Supply
Source:	Floridan Aquifer System	Permitted:	Yes

K28
SSW
1/2 - 1 Mile
Higher

FL WELLS **FLSA13000091473**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE

casing Material:	BLACK STEEL	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	4
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	Not Reported	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

L29
SE
1/2 - 1 Mile
Higher

FL WELLS **FLSA13000016607**

WELLS - SUPER ACT:

Well Type:	Limited Use PWS	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

30
South
1/2 - 1 Mile
Higher

FL WELLS **FLSO13020400681**

WELLS - SO:

Permit #:	49-00043-W	Application #:	160413-4
Permit Type:	IND	Project Name:	THOMPSON CITRUS GROVE
Land Use:	Agriculture	Acres Served:	10
Facility ID:	10612	Facility Type:	WELL
Facility Name:	W	Pump Type:	Diesel Turbine
Pump Diameter (in):	0	Well Diameter (in):	8
Pump Capacity:	337	Intake Depth (ft):	0
Intake Elevation (ft):	0	Well Depth (ft):	488
Casing Depth (ft):	250	Well Use:	Primary
Facility Status:	Existing	Facility Type:	IRR
Source:	Upper Floridan Aquifer	Permitted:	Yes

I31
SW
1/2 - 1 Mile
Higher

FL WELLS **FLSA13000007381**

WELLS - SUPER ACT:

Well Type:	Irrigation	Well Status:	INACTIVE
casing Material:	Not Reported	Well Depth (ft):	0
Casing Length (ft):	Not Reported	Casing Diameter (ft):	Not Reported
Permit #:	3494348	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	NON-POTABLE
Resident Type:	Not Reported	PWS Design:	18000

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

I32
SW
1/2 - 1 Mile
Higher

FL WELLS **FLSA13000011932**

WELLS - SUPER ACT:

Well Type:	Irrigation	Well Status:	ACTIVE
casing Material:	BLACK STEEL	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	4
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	490029801
WSRP Action:	UNFILTERED	Potable Status:	NON-POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

L33
SE
1/2 - 1 Mile
Lower

FL WELLS **FLSA13000055269**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	Not Reported	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	0
Permit #:	Not Reported	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	490002501
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

K34
SSW
1/2 - 1 Mile
Higher

FL WELLS **FLSA13000110784**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	PVC	Well Depth (ft):	330
Casing Length (ft):	247	Casing Diameter (ft):	3
Permit #:	Not Reported	Sanitary Seal:	yes
Large PWS Well:	Not Reported	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	owner	PWS Design:	Not Reported

K35
SSW
1/2 - 1 Mile
Higher

FL WELLS **FLSA13000091470**

WELLS - SUPER ACT:

Well Type:	Irrigation	Well Status:	ABANDONED
casing Material:	GALVANIZED	Well Depth (ft):	265
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	Not Reported	WSRP ID:	Not Reported

WSRP Action:	Not Reported	Potable Status:	NON-POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

L36
ESE **FL WELLS** **FLSA13000055319**
1/2 - 1 Mile
Lower

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	Not Reported	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	490010701
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

M37
West **FL WELLS** **FLSA13000055299**
1/2 - 1 Mile
Lower

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	Not Reported	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	0
Permit #:	Not Reported	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	490005601
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

L38
ESE **FL WELLS** **FLSA13000022279**
1/2 - 1 Mile
Lower

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	Galvanized	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	490010801
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

L39
ESE **FL WELLS** **FLSA13000025683**
1/2 - 1 Mile
Lower

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	Galvanized	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	2

Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	490010601
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

K40
SSW
1/2 - 1 Mile
Higher

FL WELLS **FLSA13000019030**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	Black Steel	Well Depth (ft):	300
Casing Length (ft):	225	Casing Diameter (ft):	4
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

N41
WSW
1/2 - 1 Mile
Lower

FL WELLS **FLSA13000074332**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	PVC	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	490029501
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

O42
NE
1/2 - 1 Mile
Lower

FL WELLS **FLSO13020612190**

WELLS - SO:

Permit #:	49-00945-W	Application #:	181210-2
Permit Type:	GP	Project Name:	Chungs Happy Farm
Land Use:	Agriculture	Acres Served:	32
Facility ID:	263861	Facility Type:	WELL
Facility Name:	Well-2	Pump Type:	Centrifugal
Pump Diameter (in):	0	Well Diameter (in):	4
Pump Capacity:	65	Intake Depth (ft):	0
Intake Elevation (ft):	0	Well Depth (ft):	450
Casing Depth (ft):	400	Well Use:	Primary
Facility Status:	Existing	Facility Type:	IRR
Source:	Floridan Aquifer System	Permitted:	Yes

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

P43
SW
1/2 - 1 Mile
Higher

FL WELLS **FLSA13000091472**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	Not Reported	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

O44
NE
1/2 - 1 Mile
Lower

FL WELLS **FLSO13020635572**

WELLS - SO:

Permit #:	49-00945-W	Application #:	181210-2
Permit Type:	GP	Project Name:	Chungs Happy Farm
Land Use:	Agriculture	Acres Served:	32
Facility ID:	280563	Facility Type:	WELL
Facility Name:	Well-1	Pump Type:	Centrifugal
Pump Diameter (in):	0	Well Diameter (in):	4
Pump Capacity:	65	Intake Depth (ft):	0
Intake Elevation (ft):	0	Well Depth (ft):	450
Casing Depth (ft):	400	Well Use:	Primary
Facility Status:	Existing	Facility Type:	IRR
Source:	Floridan Aquifer System	Permitted:	Yes

N45
WSW
1/2 - 1 Mile
Lower

FL WELLS **FLSA13000013888**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

Q46
SSW
1/2 - 1 Mile
Higher

FL WELLS **FLSA13000091469**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE

casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	Not Reported	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

P47
SSW
1/2 - 1 Mile
Higher

FL WELLS **FLSA13000091471**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	Not Reported	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

P48
SW
1/2 - 1 Mile
Higher

FL WELLS **FLSA13000011930**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

Q49
SSW
1/2 - 1 Mile
Higher

FL WELLS **FLSA13000091474**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ABANDONED
casing Material:	GALVANIZED	Well Depth (ft):	220
Casing Length (ft):	0	Casing Diameter (ft):	3
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	Not Reported	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	NON-POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

M50
West
1/2 - 1 Mile
Lower

FL WELLS **FLSA13000068049**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	Galvanized	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	YES
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

51
ESE
1/2 - 1 Mile
Lower

FL WELLS **FLSA13000090159**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	UNKNOWN	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	Not Reported	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

Q52
SSW
1/2 - 1 Mile
Higher

FL WELLS **FLSA13000110783**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	PVC	Well Depth (ft):	290
Casing Length (ft):	267	Casing Diameter (ft):	3
Permit #:	Not Reported	Sanitary Seal:	Not Reported
Large PWS Well:	Not Reported	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	owner	PWS Design:	Not Reported

N53
WSW
1/2 - 1 Mile
Lower

FL WELLS **FLSA13000068036**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	Not Reported

WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

M54
WSW **FL WELLS** **FLSA13000068050**
1/2 - 1 Mile
Lower

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	Galvanized	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	YES
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

Q55
SSW **FL WELLS** **FLSA13000110785**
1/2 - 1 Mile
Higher

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	yes
Large PWS Well:	Not Reported	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	owner	PWS Design:	Not Reported

N56
WSW **FL WELLS** **FLSA13000011933**
1/2 - 1 Mile
Lower

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	490029601
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

N57
WSW **FL WELLS** **FLSA13000011910**
1/2 - 1 Mile
Lower

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	Galvanized	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	2

Permit #:	Not Reported	Sanitary Seal:	YES
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

P58
SW
1/2 - 1 Mile
Higher

FL WELLS **FLSA13000016555**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	4
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

R59
WSW
1/2 - 1 Mile
Lower

FL WELLS **FLSA13000068037**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	INACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

R60
WSW
1/2 - 1 Mile
Lower

FL WELLS **FLSA13000011795**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

N61
WSW
1/2 - 1 Mile
Lower

FL WELLS **FLSA13000074331**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE

casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

Q62
SSW **FL WELLS** **FLSA13000066541**
1/2 - 1 Mile
Higher

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	Not Reported	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

R63
WSW **FL WELLS** **FLSA13000068038**
1/2 - 1 Mile
Lower

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

R64
WSW **FL WELLS** **FLSA13000074334**
1/2 - 1 Mile
Lower

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	3
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

65
ESE
1/2 - 1 Mile
Lower

FL WELLS **FLSA13000025687**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	Galvanized	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	490009001
WSRP Action:	NO ACTION AT THIS TIME	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

66
SW
1/2 - 1 Mile
Lower

FL WELLS **FLSO13020629448**

WELLS - SO:

Permit #:	49-02306-W	Application #:	130618-9
Permit Type:	GP	Project Name:	ST CLOUD BATCH PLANT
Land Use:	Industrial	Acres Served:	1
Facility ID:	265936	Facility Type:	WELL
Facility Name:	Well 1	Pump Type:	Submersible
Pump Diameter (in):	0	Well Diameter (in):	4
Pump Capacity:	90	Intake Depth (ft):	84
Intake Elevation (ft):	0	Well Depth (ft):	420
Casing Depth (ft):	250	Well Use:	Primary
Facility Status:	Proposed	Facility Type:	Industrial
Source:	Upper Floridan Aquifer	Permitted:	Yes

R67
WSW
1/2 - 1 Mile
Lower

FL WELLS **FLSA13000074335**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

R68
WSW
1/2 - 1 Mile
Lower

FL WELLS **FLSA13000023637**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE

casing Material:	Galvanized	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	4
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

S69
SW **FL WELLS** **FLSA13000011929**
1/2 - 1 Mile
Lower

WELLS - SUPER ACT:

Well Type:	Irrigation	Well Status:	ACTIVE
casing Material:	Black Steel	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	4
Permit #:	Not Reported	Sanitary Seal:	YES
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	NON-POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

70
SSW **FL WELLS** **FLSA13000090228**
1/2 - 1 Mile
Higher

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	PVC	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	3
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	Not Reported	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

T71
ESE **FL WELLS** **FLSA13000025686**
1/2 - 1 Mile
Lower

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	490010501
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

T72
ESE
1/2 - 1 Mile
Lower

FL WELLS **FLSA13000090157**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	Not Reported	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

T73
ESE
1/2 - 1 Mile
Lower

FL WELLS **FLSA13000090164**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	Not Reported	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

74
SE
1/2 - 1 Mile
Lower

FL WELLS **FLSO13020573013**

WELLS - SO:

Permit #:	49-01928-W	Application #:	080805-6
Permit Type:	GP	Project Name:	ROCKER GROVE
Land Use:	Public Water Supply	Acres Served:	1
Facility ID:	224731	Facility Type:	WELL
Facility Name:	Well No. 1	Pump Type:	Submersible
Pump Diameter (in):	0	Well Diameter (in):	3
Pump Capacity:	22	Intake Depth (ft):	0
Intake Elevation (ft):	0	Well Depth (ft):	320
Casing Depth (ft):	240	Well Use:	Production
Facility Status:	Proposed	Facility Type:	Public Water Supply
Source:	Floridan Aquifer System	Permitted:	Yes

S75
SW
1/2 - 1 Mile
Lower

FL WELLS **FLSO13020638230**

WELLS - SO:

Permit #:	49-02675-W	Application #:	180125-3

Permit Type:	GP	Project Name:	ST CLOUD RMC PLANT FL 131
Land Use:	Industrial	Acres Served:	6
Facility ID:	278424	Facility Type:	WELL
Facility Name:	WELL	Pump Type:	Submersible
Pump Diameter (in):	0	Well Diameter (in):	4
Pump Capacity:	90	Intake Depth (ft):	0
Intake Elevation (ft):	0	Well Depth (ft):	400
Casing Depth (ft):	250	Well Use:	Primary
Facility Status:	Proposed	Facility Type:	Industrial
Source:	Upper Floridan Aquifer	Permitted:	Yes

T76
ESE **FL WELLS** **FLSA13000090160**
1/2 - 1 Mile
Lower

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	Not Reported	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

U77
ESE **FL WELLS** **FLSA13000090161**
1/2 - 1 Mile
Lower

WELLS - SUPER ACT:

Well Type:	Limited Use PWS	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	300
Casing Length (ft):	0	Casing Diameter (ft):	3
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	Not Reported	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

U78
ESE **FL WELLS** **FLSA13000025668**
1/2 - 1 Mile
Lower

WELLS - SUPER ACT:

Well Type:	Non-Community PWS	Well Status:	ABANDONED
casing Material:	Galvanized	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	NON-POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

T79
ESE **FL WELLS** **FLSA13000025685**
1/2 - 1 Mile
Lower

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	490010401
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

V80
ESE **FL WELLS** **FLSA13000090163**
1/2 - 1 Mile
Lower

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	Not Reported	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

W81
SW **FL WELLS** **FLSA13000055261**
1/2 - 1 Mile
Lower

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	Not Reported	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	0
Permit #:	Not Reported	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	490001801
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

W82
SW **FL WELLS** **FLSA13000055262**
1/2 - 1 Mile
Lower

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	Not Reported	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	0
Permit #:	Not Reported	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	490001802

WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

83
WSW **FL WELLS** **FLSA13000023638**
1/2 - 1 Mile
Lower

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	Galvanized	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	4
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

V84
ESE **FL WELLS** **FLSA13000025684**
1/2 - 1 Mile
Lower

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

85
SE **FL WELLS** **FLSA13000025669**
1/2 - 1 Mile
Lower

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	UNKNOWN	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

V86
ESE **FL WELLS** **FLSA13000025671**
1/2 - 1 Mile
Lower

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2

Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	490010301
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

87
SW
1/2 - 1 Mile
Lower

FL WELLS **FLSO13020640334**

WELLS - SO:

Permit #:	49-02709-W	Application #:	180905-10
Permit Type:	GP	Project Name:	MASCHMEYER CONCRETE
Land Use:	Industrial	Acres Served:	7.6
Facility ID:	279893	Facility Type:	WELL
Facility Name:	WELL-1	Pump Type:	Submersible
Pump Diameter (in):	0	Well Diameter (in):	5
Pump Capacity:	85	Intake Depth (ft):	0
Intake Elevation (ft):	84	Well Depth (ft):	300
Casing Depth (ft):	280	Well Use:	Primary
Facility Status:	Proposed	Facility Type:	Industrial
Source:	Upper Floridan Aquifer	Permitted:	Yes

88
South
1/2 - 1 Mile
Lower

FL WELLS **FLSO13020645214**

WELLS - SO:

Permit #:	49-02743-W	Application #:	190516-14
Permit Type:	IND		
Project Name:	THOMPSON GROVE SUBDIVISION DEWATERING		
Land Use:	Dewatering	Acres Served:	45.95
Facility ID:	281782	Facility Type:	PUMP
Facility Name:	Pump-1	Pump Type:	Centrifugal
Pump Diameter (in):	6	Well Diameter (in):	0
Pump Capacity:	500	Intake Depth (ft):	0
Intake Elevation (ft):	40	Well Depth (ft):	0
Casing Depth (ft):	0	Well Use:	Primary
Facility Status:	Proposed	Facility Type:	Mining / Dewatering
Source:	Water Table aquifer	Permitted:	Yes

V89
ESE
1/2 - 1 Mile
Lower

FL WELLS **FLSA13000055318**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	RETAGGED
casing Material:	Not Reported	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Not Reported
Large PWS Well:	0	WSRP ID:	490010201
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

V90
ESE
1/2 - 1 Mile
Lower

FL WELLS **FLSA13000025670**

WELLS - SUPER ACT:

Well Type:	Private	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	Not Reported	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	490010201
WSRP Action:	UNFILTERED	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	Not Reported

X91
ESE
1/2 - 1 Mile
Lower

FL WELLS **FLSA13000007509**

WELLS - SUPER ACT:

Well Type:	Non-Community PWS	Well Status:	ACTIVE
casing Material:	GALVANIZED	Well Depth (ft):	0
Casing Length (ft):	0	Casing Diameter (ft):	2
Permit #:	3491717	Sanitary Seal:	Yes
Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	POTABLE
Resident Type:	OWNER	PWS Design:	10800

X92
ESE
1/2 - 1 Mile
Lower

FL WELLS **FLPUB1100007349**

WELLS - PUBLIC:

PWS Name:	SHELL FOOD MART	PWS Status:	ACTIVE
PWS Type:	NONCOMMUNITY	PWS Primary Service Area:	4078921729
PWS Operator:	U.S. WATER CORP	PWS Population Served:	25
PWS Last San Survey:	26-AUG-22	PWS Design Capacity:	10800
Well ID:	1	Well Name:	SHELL FOOD MART
Well Status:	ACTIVE	Year Drilled:	0
Well Depth (ft):	0	Well Availability:	PERMANENT
Aquifer:	Floridan Aquifer		

93
ESE
1/2 - 1 Mile
Lower

FL WELLS **FLSA13000008815**

WELLS - SUPER ACT:

Well Type:	Non-Community PWS	Well Status:	ABANDONED
casing Material:	Not Reported	Well Depth (ft):	Not Reported
Casing Length (ft):	Not Reported	Casing Diameter (ft):	Not Reported
Permit #:	3491717	Sanitary Seal:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Large PWS Well:	0	WSRP ID:	Not Reported
WSRP Action:	Not Reported	Potable Status:	NON-POTABLE
Resident Type:	Not Reported	PWS Design:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: FL Radon

Radon Test Results

Zip	Total Buildings	% of sites>4pCi/L	Data Source
34771	25	0.0	Certified Residential Database

Federal EPA Radon Zone for OSCEOLA County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for OSCEOLA COUNTY, FL

Number of sites tested: 25

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area	0.580 pCi/L	100%	0%	0%
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory
Source: Department of Environmental Protection
Telephone: 850-245-8238

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Public Water System (PWS) Wells (Non-Federal)
Department of Environmental Protection
Telephone: 850-245-8629
Statewide coverage of PWS Wells, excluding Federally owned facilities.

Well Construction Permitting Database
Source: Northwest Florida Water Management District
Telephone: 850-539-5999

Consumptive Use Permit Well Database
Source: St. Johns River Water Management District
Telephone: 386-329-4841

DEP GWIS - Generalized Water Information System Well Data
Source: Department of Environmental Protection
Telephone: 850-245-8507
Data collected for the Watershed Monitoring Section of the Department of Environmental Protection.

DOH and DEP Historic Study of Private Wells
Source: Department of Environmental Protection
Telephone: 850-559-0901
Historic database for private supply wells.

Permitted Well Location Database
Source: South Florida Water Management District
Telephone: 561-682-6877

Super Act Program Well Data
Source: Department of Health
Telephone: 850-245-4250
This table consists of data relating to all privately and publicly owned potable wells investigated as part of the SUPER Act program. The Florida Department of Health's SUPER Act Program (per Chapter 376.3071(4)(g), Florida Statutes), was given authority to provide field and laboratory services, toxicological risk assessments, investigations of drinking water contamination complaints and education of the public.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Water Well Location Information
Source: Suwannee River Water Management District
Telephone: 386-796-7211

Water Well Permit Database
Source: Southwest Water Management District
Telephone: 352-796-7211

Oil and Gas Permit Database
Source: Department of Environmental Protection
Telephone: 850-245-3194
Locations of all permitted wells in the state of Florida.

Florida Sinkholes
Source: Department of Environmental Protection, Geological Survey
Telephone:
The sinkhole data was gathered by the Florida Sinkhole Research Institute, University of Florida.

RADON

State Database: FL Radon
Source: Department of Health
Telephone: 850-245-4288
Zip Code Based Radon Data

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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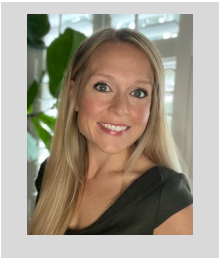
Appendix F

Project Personnel Resumes

CLAIRE FRALEY



Education

BA – Geology, University of Georgia, 2013

Specialty Certifications

40-Hour OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) Training
Mine Safety and Health Administration (MSHA) 30 CFR 48B Training
ASTM Environmental Professional

Professional Affiliations

Commercial Real Estate Women (CREW)

Professional Experience

As a Project Manager, Claire Fraley is responsible for managing environmental due diligence projects and environmental compliance for public and private sector clients. Ms. Fraley has over seven years of experience in environmental consulting, including Phase I and Phase II ESAs, contamination assessments, and ongoing monitoring efforts for industrial, commercial, agricultural, and mined land. She is responsible for coordinating sampling activities required for regulatory compliance and composing technical reports for a variety of agencies.

Since joining SCS in January 2023, Ms. Fraley has worked with private clients and regional regulatory agencies to complete due diligence assessments for land acquisition and development efforts.

Confidential Client, Various Locations, FL, Phase I ESAs. Environmental professional responsible for project management, site reconnaissance, and preparation of Phase I ESAs involving properties ranging from 500 to 15,000 acres.

Confidential Client, St. Augustine, FL, Phase I ESA, Phase II ESA, and ISR. Responsible for project management and field activities involving an active golf course facility. Project tasks included completion of a Phase I ESA, identification of soil impacts during a subsequent Phase II ESA, and completion a contamination assessment and ISR following the delineation of soil impacts onsite.

Confidential Client, Kissimmee, FL, ISR. Provided assistance with soil sampling, source removal, and groundwater monitoring in the vicinity of an abandoned railway. Project work ranged from initial discovery of impacts during previous Phase I ESA investigations to eventual site closure through an FDEP-issued No Further Action without conditions designation.

Confidential Client, Ft. Myers, FL, Compliance Monitoring. Responsible for project management, ongoing water quality monitoring, analysis of laboratory data, and completion of site-specific reporting for various agencies for permit compliance.

DON BARFIELD, LEED AP



Don Barfield

Education

MBA – General Management, University of North Florida, 2011
BS – Biology, Jacksonville University, 2005

Specialty Certifications

LEED Accredited Professional (AP)

Professional Affiliations

First Coast Manufacturers Association
Urban Land Institute – North Florida Chapter

Professional Experience

As a Project Director, Don Barfield is responsible for supporting SCS environmental services in Northeast Florida and Southeast Georgia, which include client procurement and development, sales and profitability, technical oversight and management, supporting field staff, and project development and review.

Mr. Barfield has worked on a multitude of projects throughout his career including Phase I Environmental Site Assessments (ESAs), Phase II ESAs, due diligence and risk review for large acquisitions, closure plans for RCRA facilities, UST/AST closures, brownfield assessments, cattle dip vat assessment and remedial design, and large-scale remediation projects.

Notable projects that Mr. Barfield has been involved in are described below.

Brownfield Assessments

Green Cove Springs, Florida, Brownfield Area-Wide Assessment. Project Manager responsible for coordinating and managing brownfield assessments for the City of Green Cove Springs. Responsibilities also included procurement of additional funds to support future assessment and remedial work for the Green Cove Springs Brownfield Area.

Lofts at LaVilla, Jacksonville, Brownfield Site Rehabilitation Agreement. Project Manager responsible for environmental assessment and remedial activities for an affordable housing project referred to as Lofts at LaVilla. Additional responsibilities included working with the client and their legal team on preparing a Brownfield Site Rehabilitation Agreement (BSRA) for the project area and securing tax credits for the project through the Voluntary Cleanup Tax Credit.

Due Diligence Assessments and Risk Reviews

Multinational chemical company due diligence assessment and risk review. Project Director responsible for direction and oversight of due diligence assessments and risk reviews for twenty-four chemical warehouses located throughout the U.S., South Korea, and Israel for multi-billion-dollar asset management company.

Phase I & II ESAs

30,000-Acre Timber Tract, Woodbine, Georgia, Phase I & II ESAs. Project Manager responsible for direction and oversight of a Phase I ESA and Phase II ESA for an approximate 30,000-Acre timber tract located in Woodbine, Georgia.

Front Street, Fernandina Beach, Florida, Phase II ESA. Project Manager responsible for direction and oversight of a multi-phase Phase II ESA for an active oil distribution facility and former wood treatment facility located in Fernandina Beach, Florida.

Immokalee Cattle Dip Vat, Immokalee, Florida, Phase II ESA. Project Director responsible for direction and oversight of a multi-phase Phase II ESA for a former cattle dip vat located in Immokalee, Florida.

RCRA Site Assessment and Closure Plan

Batch Acid Production Facility, Savannah, Georgia, RCRA Assessment and Closure Plan. Project Director responsible for site assessment and preparation of closure plans for several designated RCRA sites at a batch acid production facility in Savannah, Georgia.

Nona Townhomes
Project № 24028.02.01
December 2024

TRAFFIC IMPACT ANALYSIS
CITY OF ST. CLOUD
FLORIDA

Prepared for:

LENNAR
6675 Westwood Boulevard, 5th Floor
Orlando, Florida 32821

Prepared by:

3101 Maguire Boulevard, Suite 265
Orlando, Florida 32803
www.trafficmobility.com
(407) 531-5332

EXECUTIVE SUMMARY

Project Information

Name:	Nona Townhomes
Location:	Southwest corner of Lillian Lee Road and Puffin Road
Jurisdiction:	City of St. Cloud, Florida
Description:	141-Unit Attached Single-Family Residential Development (Townhomes)

Findings

Trip Generation:	1,024 Daily Trips / 68 AM Peak Hour Trips / 81 PM Peak Hour Trips
Adverse Impacts:	The transportation network is not projected to become adversely impacted due to the proposed development.

Recommendations

Turn Lane Review:	No auxiliary lanes are required at the project access driveways.

PROFESSIONAL ENGINEERING CERTIFICATION

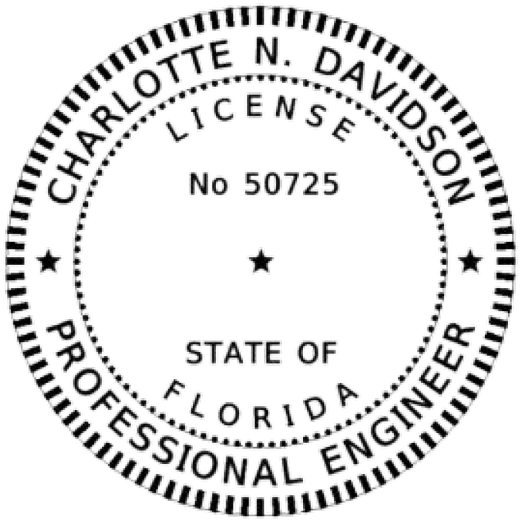
I hereby certify that I am a Professional Engineer properly registered in the State of Florida practicing with Traffic & Mobility Consultants LLC, a corporation authorized to operate as an engineering business, CA-30024, by the State of Florida Department of Professional Regulation, Board of Professional Engineers, and that I have prepared or approved the evaluations, findings, opinions, conclusions, or technical advice attached hereto for:

PROJECT: Nona Townhomes

LOCATION: City of St. Cloud, Florida

CLIENT: LENNAR

I hereby acknowledge that the procedures and references used to develop the results contained in these computations are standard to the professional practice of Transportation Engineering as applied through professional judgment and experience.



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

Charlotte N Davidson

Digitally signed by Charlotte N Davidson
Date: 2024.12.06 10:51:38 -05'00'

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

TRAFFIC & MOBILITY CONSULTANTS LLC
3101 MAGUIRE BOULEVARD, SUITE 265
ORLANDO, FLORIDA 32803
CERTIFICATE OF AUTHORIZATION CA-30024
CHARLOTTE N. DAVIDSON, P.E. NO 50725

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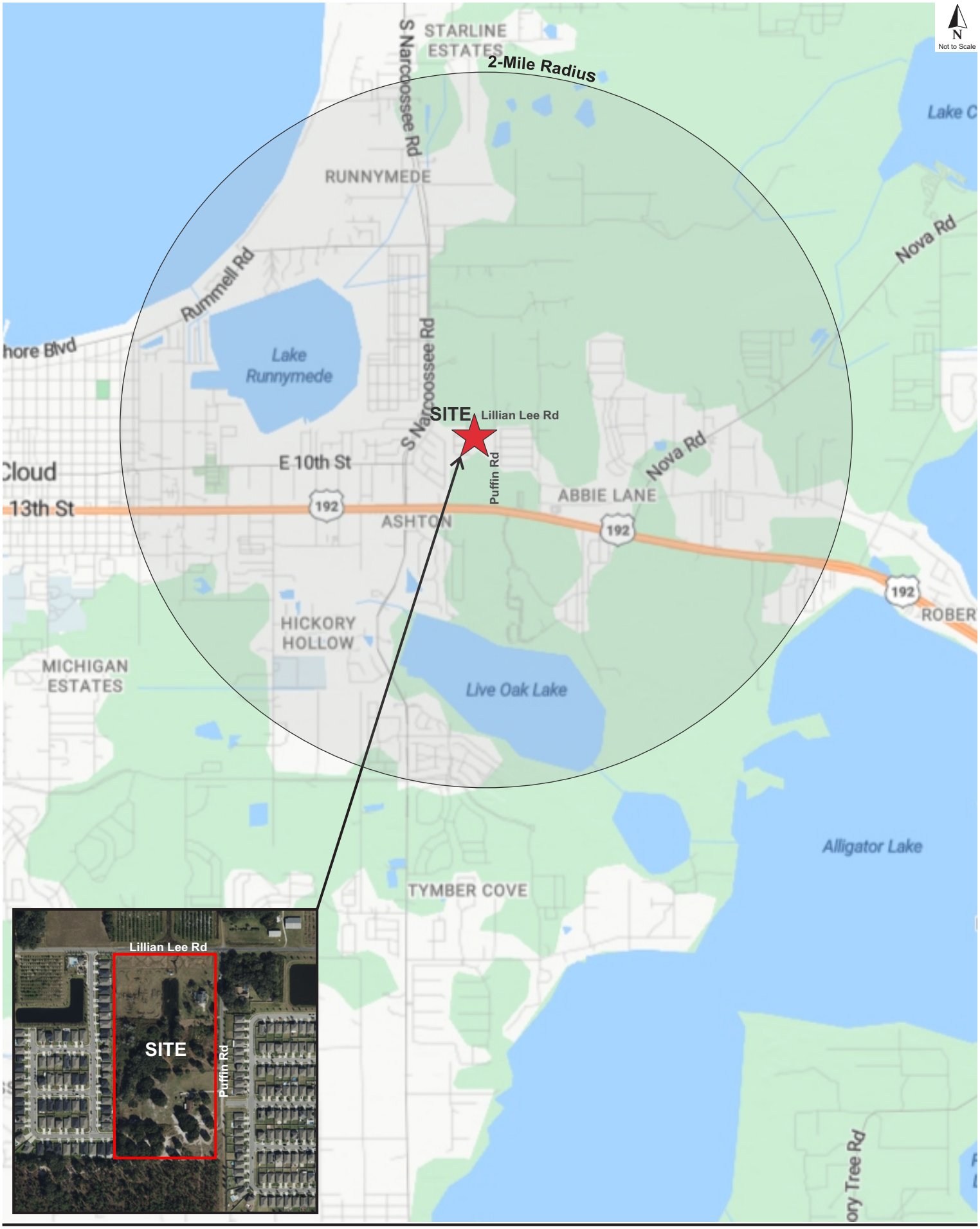
1.0 INTRODUCTION

This Traffic Impact Analysis (TIA) was conducted to assess the impact of the proposed Nona Townhomes development on the surrounding roadway network. The proposed development consists of 141 attached single family residential units (townhomes) with an expected buildout year of 2028.

The site is located southwest corner of Lillian Lee Road and Puffin Road in the City of St. Cloud, Florida. **Figure 1** depicts the site location and the surrounding transportation network. The preliminary site plan is provided in **Appendix A**. The development is proposed to be served by six (6) access locations. Five (5) full access driveways are proposed on Puffin Road and one (1) cross connection is proposed into the adjacent Rivercrest at Narcoossee neighborhood.

The analysis was conducted in accordance with a methodology approved by City of St. Cloud. The approved methodology and pertinent correspondence are included in **Appendix B**.

Data used in the analysis consisted of site plan/development information provided by the project engineers, AM and PM peak hour intersection traffic counts obtained by Traffic & Mobility Consultants LLC (TMC), and roadway capacities obtained from the *Osceola County Roadway Network Capacity Report*. Other pertinent traffic data was also obtained from the Florida Department of Transportation (FDOT).


N
Not to Scale
STARLINE ESTATES
2-Mile Radius
S Narcoossee Rd
RUNNYMEDE
Rummell Rd
Lake Runnymede
Nova Rd
SITE
Lillian Lee Rd
E 10th St
Puffin Rd
ABBIE LANE
13th St
192
ASHTON
HICKORY HOLLOW
MICHIGAN ESTATES
Live Oak Lake
Alligator Lake
TYMBER COVE
Lillian Lee Rd
SITE
Puffin Rd

2.0 PROJECT TRAFFIC

2.1 Trip Generation

The Nona Townhomes development is being designed as single-family attached housing. The trip generation analysis was conducted using the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition* and applying ITE Code 215 Single-Family Attached (Townhomes). Trip generation equations published for the land uses were applied to the proposed development program to determine the total trips generated by the project. The trip generation calculations are summarized in **Table 1** and detailed information is included in **Appendix C**.

Table 1
Trip Generation Analysis

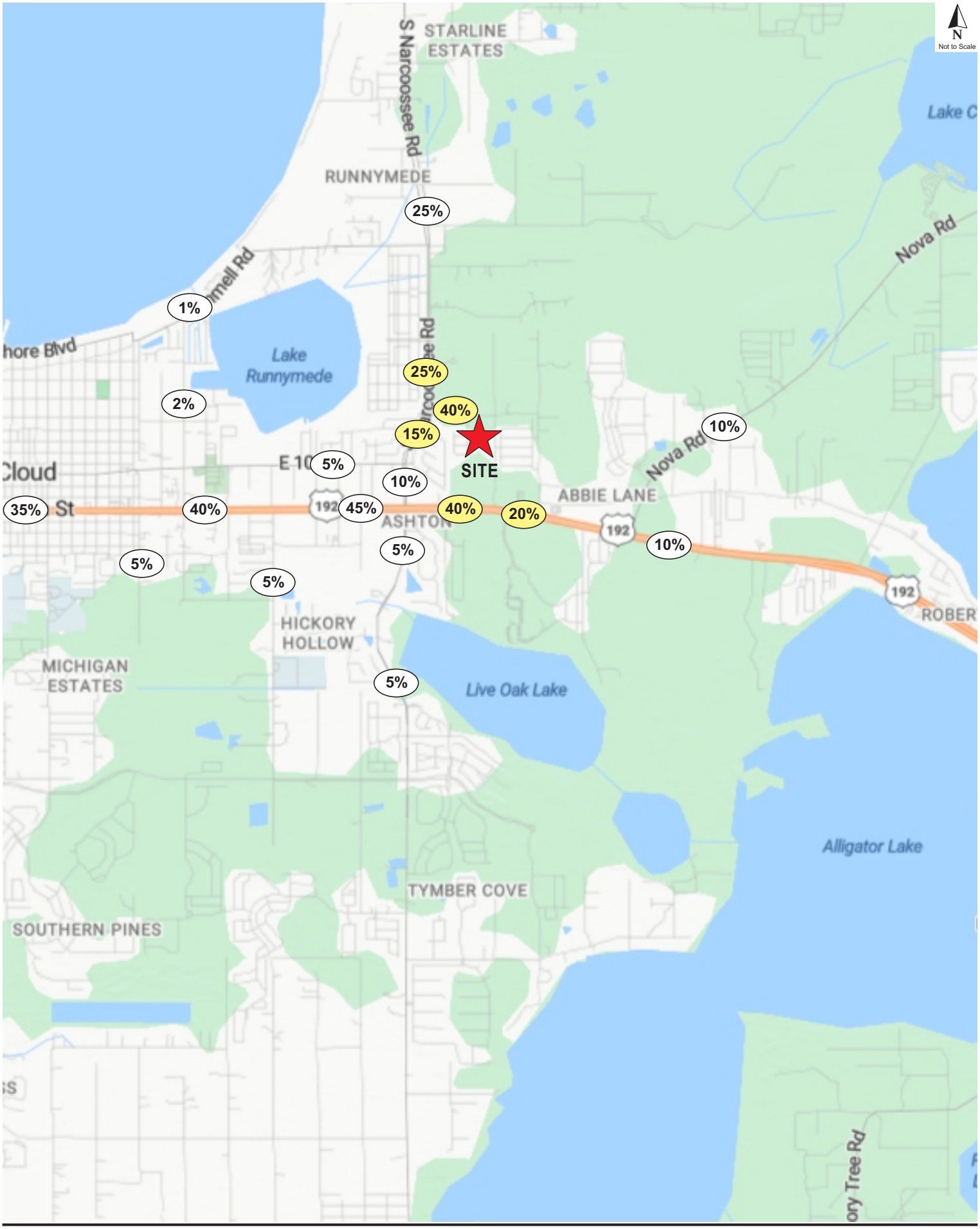
ITE			Daily		AM Peak Hour				PM Peak Hour			
Code	Land Use	Size	Rate	Trips	Rate	Total	Enter	Exit	Rate	Total	Enter	Exit
215	Single-Family Attached (Townhomes)	141 DU	7.26	1,024	0.48	68	17	51	0.57	81	48	33

Trip generation analysis based on ITE Trip Generation Manual, 11th Edition

The proposed development is projected to generate 1,024 new daily trips, of which 68 trips occur during the AM peak hour and 81 trips occur during the PM peak hour.

2.2 Trip Distribution

A preliminary trip distribution pattern was developed using the *Central Florida Regional Planning Model (CFRPM)* v7.0. The adopted model was modified to include a project specific Traffic Analysis Zone with the corresponding socio-economic data to reflect the proposed development. A select zone analysis was executed to obtain a model-generated trip distribution pattern on the surrounding transportation network. Minor manual adjustments were applied to the model generated distribution pattern to better reflect the local transportation network and prevailing travel patterns. The final trip distribution pattern is illustrated in **Figure 2** and the model output plot is included **Appendix D**.


N
Not to Scale
STARLINE ESTATES
S Narcoossee Rd
RUNNYMEDE
25%
Nova Rd
1%
Lake Runnymede
25%
2%
40%
15%
SITE
10%
5%
10%
35%
St
40%
192
45%
ASHTON
40%
20%
ABBIE LANE
192
10%
5%
5%
192
HICKORY HOLLOW
MICHIGAN ESTATES
5%
Live Oak Lake
Alligator Lake
TYMBER COVE
SOUTHERN PINES

3.0 STUDY AREA

3.1 Study Roadways

The study area was established in accordance with an approved methodology and the requirements of the City of St. Cloud. The project is projected to generate more than 50 PM peak hour external trips, meeting the threshold of a Tier 2 Traffic Impact Analysis (TIA). A Tier 2 study area will encompass roadway segments and major intersections within a 2-mile radius of the proposed development. The project's study area determination is provided in **Table 2.** The roadway segment information and characteristics were obtained from the Osceola County *2024 Roadway Network Capacity Report*, which is included in **Appendix E.**

Table 2
Study Segments

No.	Roadway Segment	Count Sta No.	Count Source	# of Lns	LOS Std	PH Dir Cap
	Hickory Tree Rd					
1	US 192 to Nolte Rd	540	OC	2	D	870
	Lillian Lee Rd*					
2	Narcoossee Road to Nora Tyson Road	--	--	2	D	600
	Narcoossee Rd					
3	Jones Rd to Rummel Rd	539	OC	4	D	3,320
4	Rummel Rd to 10th St	541	OC	4	D	1,850
5	10th St to US 192-441	589	OC	4	D	1,850
	Nova Rd					
6	US 192 to Lake Lizzie Dr	9011	OC	2	D	1,140
7	Lake Lizzie Dr to Eden Dr	542	OC	2	D	1,140
	Orange Ave					
8	US 192 to Rummell Rd	538	OC	2	D	460
	Puffin Rd*					
9	US 192 to Lillian Lee Rd	--	--	2	D	600
	Rummell Rd					
10	Mississippi Ave to Narcoossee Rd	517	OC	2	D	830
	Tenth (10th) St					
11	Michigan Ave to Narcoossee Rd	515	OC	2	D	600
	US 192					
12	Columbia Ave/Budinger Ave to Mississippi Ave	925021	FDOT	6	D	2,680
13	Mississippe Ave to Narcoossee Rd / Hickory Tree Rd	927	OC	6	D	2,810
14	Narcoossee Rd / Hickory Tree Rd to Nova Rd (CR 532)	920255[3]	FDOT	6	D	4,980
15	Nova Rd (CR 532) to Old Melbourne Hwy	909	OC	4	D	3,320

Source: Osceola County's 2024 Roadway Network Capacity Report
**LOS standard and Peak Hour Capacity based on similar 2-lane segment of Tenth (10th) St*

3.2 Study Intersections

The study area encompasses major intersections that were identified in the approved methodology. In addition, the development is proposed to be served by six (6) access driveways. Five (5) full access driveways are proposed on Puffin Road and one (1) cross connection is proposed into the adjacent Rivercrest at Narcoossee neighborhood. The study intersections and access points are presented in **Table 3**.

Table 3
Study Intersections

Int #	Intersection		Traffic Control
	Major Road	Minor Road	
1	Narcoossee Rd	Rummell Rd	Signal
2	Narcoossee Rd	Lilian Lee Rd	Two-Way Stop
3	Narcoossee Rd	10th Street	Signal
4	Narcoossee Rd	US 192-441	Signal
5	US 192-441	Old Hickory Rd	Signal
6	US 192-441	Puffin Road	Signal (Future)
7	US 192-441	Nova Rd	Signal
8	Lilinal Lee Rd	River Crest Ave	Two-Way Stop
9	Puffin Rd	Access A	Two-Way Stop
10	Puffin Rd	Access B	Two-Way Stop
11	Puffin Rd	Access C	Two-Way Stop
12	Puffin Rd	Access D	Two-Way Stop
13	Puffin Rd	Access E	Two-Way Stop

4.0 PLANNED and PROGRAMMED IMPROVEMENTS

The *Osceola County Capital Improvement Plan (CIP)* was reviewed to determine if any significant transportation capacity improvements are programmed or planned within the general area of the project. There are no planned or programmed in the study area according to the *CIP*. However, segments of Puffin Road, Nora Tyson Road and Lillian Lee Road are planned to be improved to City standards. US 192 and Puffin Road is under design for a traffic signal. The Narcoossee Road and Lillian Lee Road intersection is also planned for a traffic signal and to add a westbound right turn lane. The timing of the intersection improvements is unknown.

5.0 TRAFFIC PROJECTIONS

The buildout year for the proposed development is 2028. Existing roadway and intersection volumes were projected to obtain the background traffic for the year of 2028, as described below.

5.1 Projected Roadway Volumes

The existing volumes are projected to the background conditions by applying the maximum volumes between the historical growth volumes and the committed trips. Historical growth volumes were calculated by applying annual growth rates to the existing traffic volumes. These growth rates were determined based on historical annual average daily traffic (AADT) volumes obtained from *Osceola County Traffic Counts* and *Florida Traffic Online (FTO)*. A minimum annual growth rate of 5% was used to project traffic growth on the study segments where observed growth was less than 5%, or where historical growth rates were not available. The historical growth trend reports are included in the **Appendix F**. The projected background growth volumes were next compared to a total of fourteen (14) vested developments. The information of the thirteen (13) vested developments is obtained from the nearby Eden – St. Cloud TIA. Additionally, this study included the project trips for the Eden - St. Cloud project. The information of the committed trips is included in the **Appendix G**. The higher of the growth and the vested traffic was consulted. In most all cases, the combined vested development trips exceed the historical growth. **Table 4** illustrates the calculations of the projected background volumes for the study segments.

5.2 Projected Intersection Volumes

Existing AM and PM peak hour turning movement volumes were obtained at the study intersections on January 10, 2024, except for Lillian Road and River Crest intersection where counts were taken on November 12, 2024. The counts were seasonally adjusted using the applicable seasonal factors obtained from the *FDOT Traffic Online* data. The raw turning movement volumes and supporting *FDOT Peak Season Factor Category Report* are provided in **Appendix H**.

Table 4
Growth Rate Calculation

Roadway Segment	Count Sta	No Lns	Dir	2024 Exist'g Vol	Historical		Vested Trips		Max Vol	2028 Back'd Vol
					GR	Vol	Total Vol	Eqvlt GR		
Hickory Tree Rd										
US 192 to Nolte Rd	540	2	NB SB	529 867	5.00%	106 173	220 130	6.3%	220 173	749 1,040
Lillian Lee Rd*										
Narcoossee Road to Nora Tyson Road	TMC[1]	2	EB WB	63 162	5.00%	13 32	245 150	43.8%	245 150	308 313
Narcoossee Rd										
Jones Rd to Rummel Rd	539	4	NB SB	1,439 1,783	5.00%	288 357	196 327	4.1%	288 357	1,727 2,140
Rummel Rd to 10th St	541	4	NB SB	1,296 1,509	5.00%	259 302	320 344	5.9%	320 344	1,616 1,853
10th St to US 192-441	589	4	NB SB	1,495 1,724	5.34%	319 368	289 321	4.7%	319 368	1,814 2,092
Nova Rd										
US 192 to Lake Lizzie Dr	9011	2	NB SB	423 368	5.00%	85 74	278 200	15.1%	278 200	701 568
Lake Lizzie Dr to Eden Dr	542	2	NB SB	205 299	5.60%	46 67	278 200	23.7%	278 200	483 499
Orange Ave										
US 192 to Rummell Rd	538	2	NB SB	106 93	5.00%	21 19	1 1	0.3%	21 19	127 112
Puffin Rd*										
US 192 to Lillian Lee Rd	TMC[2]	2	NB SB	3 1	5.00%	1 0	98 86	1095.2%	98 86	101 87
Rummell Rd										
Mississippi Ave to Narcoossee Rd	517	2	EB WB	363 407	5.00%	73 81	4 2	0.2%	73 81	436 488
Tenth (10th) St										
Michigan Ave to Narcoossee Rd	515	2	EB WB	346 249	5.00%	69 50	34 19	2.2%	69 50	415 299
US 192										
Columbia Ave/Budinger Ave to Mississippi Ave	925021[3]	6	EB WB	1,727 1,963	5.00%	345 393	660 403	7.2%	660 403	2,387 2,366
Mississippe Ave to Narcoossee Rd / Hickory Tree Rd	927	6	EB WB	1,689 1,568	5.27%	356 331	659 402	8.1%	659 402	2,348 1,970
Narcoossee Rd / Hickory Tree Rd to Nova Rd (CR 532)	920255[3]	6	EB WB	1,748 1,987	8.30%	580 660	899 585	9.9%	899 660	2,647 2,647
Nova Rd (CR 532) to Old Melbourne Hwy	909	4	EB WB	1,245 1,225	6.68%	333 327	445 443	9.0%	445 443	1,690 1,668

Sources: Osceola County's 2024 Roadway Network Capacity Report and Florida Traffic Online

(1) TMC - Turning Movement Counts were obtained by TMC from study intersections during PM peak hour in 2024; 1.02 seasonal factor was applied.

(2) TMC - Turning Movement Counts were obtained from Lakeside at Satilla TIA v2.2 and a 5% growth was applied to derive 2024 volumes

(3) Existing volume obtained from Florida Traffic Online AADT multiplied by K Factor and D Factor

**LOS standard and Peak Hour Capacity based on similar 2-lane segment of Tenth (10th) St*

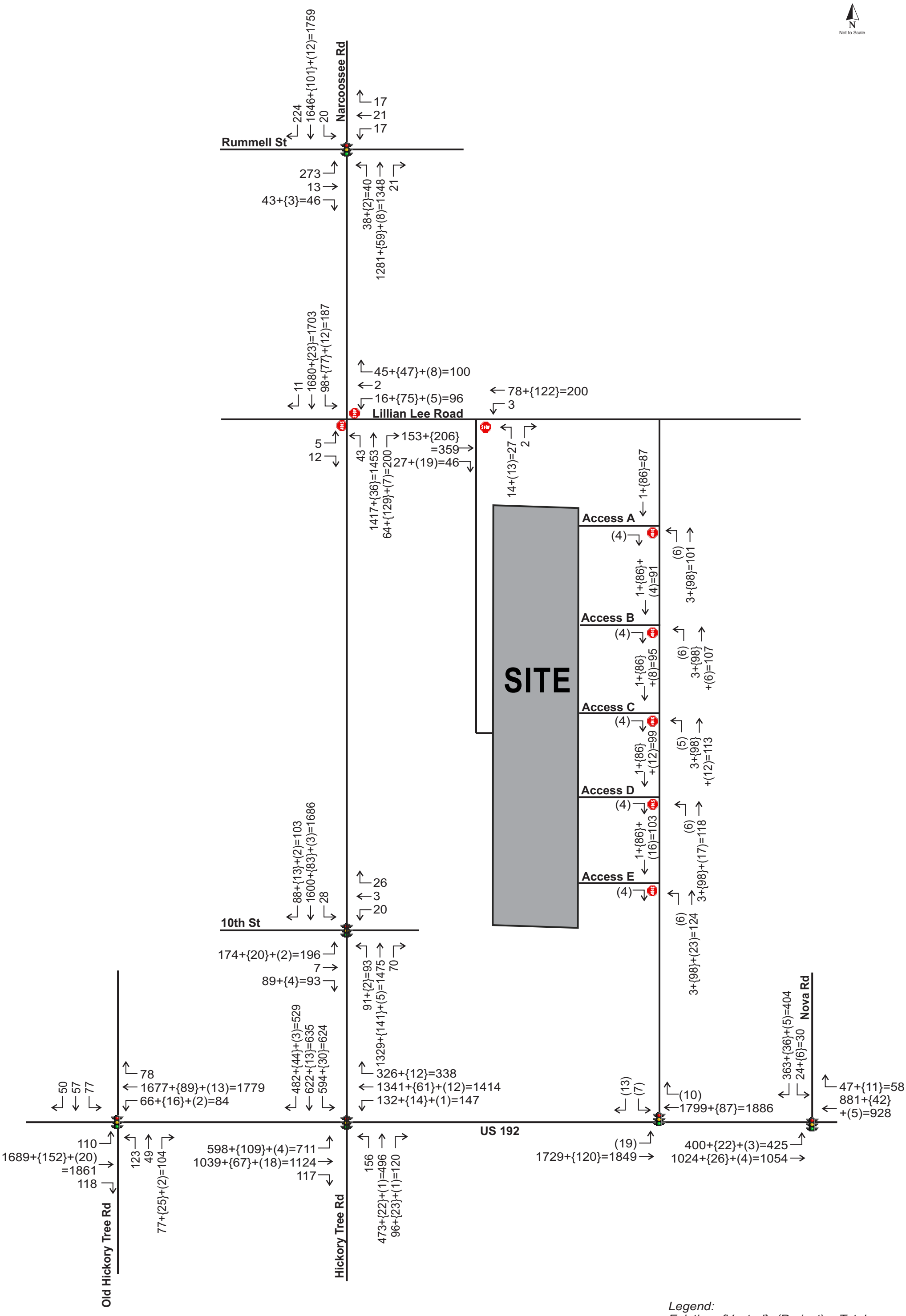
A 5% growth rate was considered for segments where historical AADT data were unavailable

The total projected intersection volumes include background traffic and project trips. Background traffic is calculated based on the existing turning movement counts and vested trips from the nearby developments mentioned in Section 5.1 (**Appendix G**). Project trips were derived from the trip generation and trip distribution patterns. Detailed intersection volume calculations are provided in **Appendix I** and the resulting existing, background, and buildout volumes are illustrated in **Figure 3** and **Figure 4** for the AM and PM peak hour, respectively.

N
Not to Scale

Narcoossee Rd
Rummell St
121
976+{30}+(4)=1010
11
2
3
8
226
3
35+{1}=36
7+{3}=10
1122+{97}+(13)=1232
28
Lillian Lee Road
6
1029+{36}=1065
77+{25}+(4)=106
160+{72}+(13)=245
2
17+{110}+(8)=135
186+{182}=368
2
11
2
35
6
1480+{13}=1493
36+{37}+(3)=76
152+{62}
=214
4+(7)=11
23+(21)=44
4
3+{98}=101
SITE
Access A
(6)
3+{98}+
(6)=107
(2)
1+{86}=87
Access B
(6)
3+{98}+
(12)=113
(2)
1+{86}
+(2)=89
Access C
(6)
3+{98}+
(18)=119
(2)
1+{86}
+(4)=91
Access D
(6)
3+{98}+
(24)=125
(2)
1+{86}+(6)=93
Access E
(6)
(2)
1+{86}+(8)=95
10th St
42+{18}+(3)=63
1029+{128}+(5)=1162
9
44
2
37
96+{8}+(1)=105
2
49+{1}=50
21+{5}=26
1386+{42}+(2)=1430
21
Nova Rd
348+{12}+(1)=361
17+{10}=27
33+{3}=36
1127+{12}
+(2)=1141
58
38
58
63
1560+{143}+(20)=1723
49+{24}+(3)=76
427+{57}+(4)=488
211+{31}+(1)=243
440+{41}=481
284+{8}=292
1288+{100}+(19)=1407
188+{22}+(1)=211
(20)
(10)
(3)
1760+{130}=1890
US 192
64
1022+{48}+(6)=1076
65
123
52
57+{7}+(1)=85
596+{32}+(1)=629
847+{23}+(6)=876
108
150
392+{7}+(1)=400
78+{7}+(1)=86
(7)
1364+{76}=1440
196+{36}+(5)=237
795+{40}+(5)=840
Old Hickory Tree Rd
Hickory Tree Rd

Legend:
Existing+{Vested}+(Project) = Total


N
Not to Scale
Narcoossee Rd
Rummell St
224
1646+{101}+(12)=1759
20
17
21
17
273
13
43+{3}=46
38+{2}=40
1281+{59}+(8)=1348
21
11
1680+{23}=1703
98+{77}+(12)=187
45+{47}+(8)=100
2
16+{75}+(5)=96
Lillian Lee Road
78+{122}=200
3
5
12
43
1417+{36}=1453
64+{129}+(7)=200
153+{206}
=359
27+(19)=46
14+(13)=27
2
1+{86}=87
Access A
(4)
(6)
3+{98}=101
1+{86}+
(4)=91
Access B
(4)
(6)
3+{98}
+(6)=107
1+{86}
+(8)=95
SITE
Access C
(4)
(5)
3+{98}
+(12)=113
1+{86}
+(12)=99
Access D
(4)
(6)
3+{98}+(17)=118
1+{86}+
(16)=103
Access E
(4)
(6)
3+{98}+(23)=124
88+{13}+(2)=103
1600+{83}+(3)=1686
28
26
3
20
10th St
174+{20}+(2)=196
7
89+{4}=93
91+{2}=93
1329+{141}+(5)=1475
70
482+{44}+(3)=529
622+{13}=635
594+{30}=624
363+{36}+(5)=404
24+{6}=30
Nova Rd
50
57
77
78
1677+{89}+(13)=1779
66+{16}+(2)=84
326+{12}=338
1341+{61}+(12)=1414
132+{14}+(1)=147
(13)
(7)
(10)
1799+{87}=1886
47+{11}=58
881+{42}
+(5)=928
US 192
110
1689+{152}+(20)
=1861
118
123
49
77+{25}+(2)=104
598+{109}+(4)=711
1039+{67}+(18)=1124
117
156
473+{22}+(1)=496
96+{23}+(1)=120
(19)
1729+{120}=1849
400+{22}+(3)=425
1024+{26}+(4)=1054
Old Hickory Tree Rd
Hickory Tree Rd
Legend:
Existing+{Vested}+(Project) = Total

6.0 CAPACITY ANALYSIS

6.1 Roadway Segment Capacity

Roadway segment capacity was analyzed based on the adopted service volumes, capacity, and the corresponding traffic volumes to determine the resulting LOS, as summarized in **Table 5**. It is noted that for the roadway segments of Lillian Lee Road and Puffin Road, the adopted LOS standard and peak hour directional capacity were derived from the similar 2-lane segment of Tenth (10th) Street.

The results of the roadway segment capacity analysis reveals that three (3) following segments are projected to exceed the available capacity due to background traffic:

- Hickory Tree Road from US 192 to Nolte Road
  Project trips contribute 0.2% of the roadway capacity
- Narcoossee Road from Rummell Road to 10th Street
  Project trips contribute 0.6% of the roadway capacity
- Narcoossee Road from 10th Street to US 192
  Project trips contribute 0.2% of the roadway capacity

Therefore, the project impacts on these segments are considered insignificant. All other roadway segments are projected to operate adequately at buildout condition.

Table 5
Roadway Segment Capacity Analysis

Roadway Segment	Count Sta	No Lns	PkDir Cap	Dir	2024 Existing			2028 Background			2028 Buildout					
					Vol	LOS	V/C	Vol	LOS	V/C	Distr	In/O	Trips	Vol	LOS	V/C
Hickory Tree Rd																
US 192 to Nolte Rd	540	2	870	NB SB	529 867	C D	1.00	749 1,040	C F	1.20	5%	in out	2 2	751 1,042	C F	1.20
Lillian Lee Rd*																
Narcoossee Road to Nora Tyson Road	TMC[1]	2	600	EB WB	63 162	B B	0.27	308 313	B B	0.52	40%	in out	19 13	328 326	B B	0.55
Narcoossee Rd																
Jones Rd to Rummel Rd	539	4	3,320	NB SB	1,439 1,783	B C	0.54	1,727 2,140	B C	0.64	25%	out in	8 12	1,735 2,152	B C	0.65
Rummel Rd to 10th St	541	4	1,850	NB SB	1,296 1,509	B C	0.82	1,616 1,853	C F	1.00	25%	out in	8 12	1,624 1,864	C F	1.01
10th St to US 192-441	589	4	1,850	NB SB	1,495 1,724	C C	0.93	1,814 2,092	D F	1.13	10%	in out	5 3	1,819 2,096	D F	1.13
Nova Rd																
US 192 to Lake Lizzie Dr	9011	2	1,140	NB SB	423 368	C B	0.37	701 568	C C	0.62	10%	out in	3 5	705 573	C C	0.62
Lake Lizzie Dr to Eden Dr	542	2	1,140	NB SB	205 299	B B	0.26	483 499	B B	0.44	10%	out in	3 5	486 504	B B	0.44
Orange Ave																
US 192 to Rummell Rd	538	2	460	NB SB	106 93	B B	0.23	127 112	B B	0.28	2%	in out	1 1	127 112	B B	0.28
Puffin Rd*																
US 192 to Lillian Lee Rd	TMC[2]	2	1,140	NB SB	3 1	B B	0.00	101 87	B B	0.09	60%	in out	29 20	130 107	B B	0.11
Rummell Rd																
Mississippi Ave to Narcoossee Rd	517	2	830	EB WB	363 407	B B	0.49	436 488	B C	0.59	1%	in out	0 0	436 489	B C	0.59
Tenth (10th) St																
Michigan Ave to Narcoossee Rd	515	2	600	EB WB	346 249	B B	0.58	415 299	C B	0.69	5%	in out	2 2	418 300	C B	0.70
US 192																
Columbia Ave/Budinger Ave to Mississippi Ave	925021[3]	6	2,680	EB WB	1,727 1,963	C C	0.73	2,387 2,366	D D	0.89	35%	in out	17 12	2,404 2,378	D D	0.90
Mississippe Ave to Narcoossee Rd / Hickory Tree Rd	927	6	2,810	EB WB	1,689 1,568	C C	0.60	2,348 1,970	D C	0.84	45%	in out	22 15	2,370 1,985	D C	0.84
Narcoossee Rd / Hickory Tree Rd to Nova Rd (CR 532)	920255[3]	6	4,980	EB WB	1,748 1,987	B B	0.40	2,647 2,647	B B	0.53	40%	in out	19 13	2,666 2,660	C B	0.54
Nova Rd (CR 532) to Old Melbourne Hwy	909	4	3,320	EB WB	1,245 1,225	B B	0.38	1,690 1,668	B B	0.51	10%	out in	3 5	1,693 1,672	B B	0.51

Sources: Osceola County's 2024 Roadway Network Capacity Report and Florida Traffic Online

(1) TMC - Turning Movement Counts were obtained by TMC from study intersections during PM peak hour in 2024; 1.02 seasonal factor was applied.

(2) TMC - Turning Movement Counts were obtained from Lakeside at Satilla TIA v2.2 and a 5% growth was applied to derive 2024 volume

(3) Existing volume obtained from Florida Traffic Online AADT multiplied by K Factor and D Factor

**LOS standard and Peak Hour Capacity based on similar 2-lane segment of Tenth (10th) St*

A 5% growth rate was considered for segments where historical AADT data were unavailable

6.2 Intersection Capacity

The study intersections were analyzed in accordance with the methods of the *Highway Capacity Manual (HCM)* as applied in the *Synchro* analytical tool. The *HCM* analysis worksheets referenced for the intersection review are included in the **Appendix J**. The analysis results for existing, background, and buildout conditions are summarized in **Table 6,** which reveal the following:

- The signalized intersection of Rummell Road and Narcoossee Road is currently experiencing delays on the eastbound and the westbound approaches in the AM and PM peak hours and is projected to continue to do in the buildout condition. Project trips contribute only 0.53% of the total intersection traffic and does not contribute any traffic to adverse eastbound and westbound movements. However, the *HCM* volume to capacity ratio (v/c) is lower than 1.0 for both approaches. Hence, the traffic on these approaches does not exceed capacity. Furthermore, the signalized intersections of Rummell Road and Narcoossee Road, and Tenth (10th) Street and Narcoossee Road are operating in a coordinated system, causing the traffic coming from minor streets to experience delays.
- The intersection of Lillian Lee Road and Narcoossee Road is projected to continue to operate with delays on the eastbound and the westbound approaches in the AM and PM peak hours. Project trips contribute only 0.84% of the total intersection traffic. However, the intersection is planned to be signalized in future, which should improve the delays for the eastbound and the westbound traffic movements.
- The signalized intersection of Tenth (10th) Street and Narcoossee Road is experiencing delays on the eastbound and the westbound approaches in the AM and PM peak hour. However, the *HCM* v/c is lower than 1.0 for both approaches. Hence, the traffic on these approaches does not exceed capacity. Project trips contribute only 0.32% of the total traffic for the total intersection traffic. The westbound movement does not carry any project trips.
- The signalized intersection of US 192 and Narcoossee Road/Hickory Tree Road is operating with delays and projected to continue to do so in the AM and PM peak hour. Project trips contribute approximately 0.62% of the total intersection traffic and thus has minimal impact.

- The southbound approach of the signalized intersection at US 192 and Old Hickory Tree Road is operating with delays and projected to continue to do so in the AM and PM peak hour. However, as the *HCM* v/c is lower than 1.0, the traffic on the approach does not exceed capacity and overall, the intersection is projected to operate within its LOS standard. The adverse southbound movement does not carry any project trips.
- The planned signalized intersection of US 192 and Puffin Road is analyzed at the buildout condition. The intersection is projected to operate within its acceptable LOS standard.
- The signalized intersection of US 192 and Nova Road is projected to continue to operate adequately.
- All the project access driveways are found to be operating adequately without any delays.

Table 6
Intersection Capacity Analysis

Int	Intersection		Control	Time		EB		WB		NB		SB		Overall	
#	Major Road	Minor Road		Period	Scenario	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	Narcoossee Rd	Rummell Rd	Signal	AM	Existing	110.6	F	105.6	F	12.4	B	12.3	B	23.0	C
					Backg'd	110.5	F	105.6	F	13.0	B	12.8	B	23.0	C
					Buildout	110.5	F	105.6	F	13.1	B	12.8	B	23.0	C
				PM	Existing	94.5	F	88.4	F	16.5	B	27.0	C	30.2	C
					Backg'd	94.3	F	88.4	F	17.1	B	30.0	C	31.7	C
					Buildout	94.3	F	88.4	F	17.2	B	30.4	C	31.9	C
2	Narcoossee Rd	Lilian Lee Rd	Two-Way Stop	AM	Existing	42.5	E	57.1	F	12.6	B	16.0	C	--	--
					Backg'd	>300	F	>300	F	12.9	B	17.8	C	--	--
					Buildout	8.3	A	>300	F	12.9	B	18.0	C	--	--
				PM	Existing	55.0	F	66.4	F	16.8	B	16.1	C	--	--
					Backg'd	>300	F	>300	F	17.1	C	24.2	C	--	--
					Buildout	14.3	B	>300	F	17.1	C	25.8	D	--	--
3	Narcoossee Rd	10th Street	Signal	AM	Existing	90.4	F	98.7	F	13.3	B	11.9	B	19.5	B
					Backg'd	89.8	F	98.7	F	14.0	B	13.1	B	20.0	C
					Buildout	89.6	F	98.7	F	14.1	B	13.2	B	20.1	C
				PM	Existing	88.6	F	105.6	F	21.9	C	26.3	C	30.3	C
					Backg'd	89.4	F	105.6	F	23.9	C	29.5	C	32.7	C
					Buildout	89.5	F	105.6	F	24.1	C	29.7	C	32.9	C
4	Narcoossee Rd	US 192-441	Signal	AM	Existing	123.2	F	75.6	E	104.8	F	96.5	F	98.4	F
					Backg'd	136.4	F	85.6	F	104.7	F	104.9	F	107.5	F
					Buildout	136.8	F	85.5	F	104.7	F	105.7	F	107.7	F
				PM	Existing	66.1	E	79.2	F	223.8	F	151.8	F	113.6	F
					Backg'd	80.3	F	91.8	F	239.5	F	157.7	F	124.6	F
					Buildout	81.0	F	89.8	F	240.3	F	158.3	F	124.4	F

Average delay expressed in seconds/vehicle

Table 6
Intersection Capacity Analysis (Cont'd)

Int #	Intersection		Control	Time Period	Scenario	EB		WB		NB		SB		Overall	
	Major Road	Minor Road				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
5	US 192-441	Old Hickory Rd	Signal	AM	Existing	22.1	C	38.7	D	74.9	E	98.3	F	38.3	D
					Backg'd	23.6	C	40.8	D	74.8	E	98.3	F	39.7	D
					Buildout	23.8	C	41.1	D	74.8	E	98.3	F	39.9	D
				PM	Existing	27.1	C	28.8	C	60.7	E	82.3	F	32.3	C
					Backg'd	29.2	C	29.6	C	60.9	E	82.3	F	33.5	C
					Buildout	29.5	C	29.6	C	60.9	E	82.3	F	33.7	C
6	US 192-441	Puffin Road	Signal (Future)	AM	Buildout	11.6	B	23.7	C	--	--	24.7	C	18.5	B
				PM	Buildout	13.5	B	24.6	C	--	--	25.1	C	19.1	B
7	US 192-441	Nova Rd	Signal	AM	Existing	11.6	B	12.5	B	--	--	55.3	E	12.4	B
					Backg'd	12.9	B	14.6	B	--	--	56.2	E	14.3	B
					Buildout	13.0	B	14.9	B	--	--	56.4	E	14.5	B
				PM	Existing	18.7	B	18.5	B	--	--	62.8	E	19.1	B
					Backg'd	20.0	B	20.3	B	--	--	64.3	E	20.7	C
					Buildout	20.1	C	20.5	C	--	--	64.4	E	20.8	C
8	Lilinal Lee Rd	River Crest Ave	Two-Way Stop	AM	Existing	--	--	7.7	A	11.7	B	--	--	--	--
					Backg'd	--	--	7.9	A	15.5	C	--	--	--	--
					Buildout	--	--	7.9	A	17.1	C	--	--	--	--
				PM	Existing	--	--	7.6	A	10.1	B	--	--	--	--
					Backg'd	--	--	8.2	A	13.1	B	--	--	--	--
					Buildout	--	--	8.2	A	13.6	B	--	--	--	--
9	Puffin Rd	Access A	Two-Way Stop	AM	Buildout	8.8	A	--	--	7.4	A	--	--	--	--
				PM	Buildout	8.8	A	--	--	7.4	A	--	--	--	--
10	Puffin Rd	Access B	Two-Way Stop	AM	Buildout	8.9	A	--	--	7.4	A	--	--	--	--
				PM	Buildout	8.8	A	--	--	7.4	A	--	--	--	--
11	Puffin Rd	Access C	Two-Way Stop	AM	Buildout	8.9	A	--	--	7.5	A	--	--	--	--
				PM	Buildout	8.8	A	--	--	7.4	A	--	--	--	--
12	Puffin Rd	Access D	Two-Way Stop	AM	Buildout	8.9	A	--	--	7.5	A	--	--	--	--
				PM	Buildout	8.8	A	--	--	7.4	A	--	--	--	--
13	Puffin Rd	Access E	Two-Way Stop	AM	Buildout	9.0	A	--	--	7.5	A	--	--	--	--
				PM	Buildout	8.8	A	--	--	7.4	A	--	--	--	--

Average delay expressed in seconds/vehicle

7.0 ACCESS REVIEW

Lillian Lee Road is two (2) lane undivided road with a posted speed limit of 25 mph, which connects Rivercrest at Narcoossee neighborhood to Narcoossee Road. Lillian Lee Road is planned to be extended to the east with the City's standard. The proposed development can be accessed through the River Crest Avenue. In addition, five (5) full access driveways are proposed on Puffin Road. Puffin Road will be improved to the City's standard and it is assumed that the posted limit will be 25 mph, similar to the Lillian Lee road.

7.1 Turn Lane Review

Site access treatment was evaluated to determine the need for deceleration lanes at the access driveways. Turn lane warrants were evaluated based on Table 4.4.3-3 of the *Osceola County Land Development Code (LDC)*. An excerpt from the *LDC* is included in **Appendix K**. Based on the guideline, Lillian Lee Road falls within Group 1 as it has a projected AADT of 6,900 [(308+313 peak hour trips)/ 0.09 k-factor] which is less than 10,000 AADT and having a posted speed limit of less than 30 mph. Similarly, Puffin Road also falls within Group 1 as it has a projected AADT of 2,089 [(101+87 peak hour trips)/ 0.09 k-factor] which is less than 10,000 AADT and having a posted speed limit of less than 30 mph. Per the recommendation for Group 1, no auxiliary lanes are required at the project access driveways.

8.0 MULTIMODAL ASSESSMENT

To ensure transportation network connectivity within the vicinity of the proposed development, this section evaluates alternative modes of transportation, emphasizing on the transit-network, pedestrian facilities, and bicyclist facilities. The analysis covers a 0.25-mile walking distance from the proposed development.

8.1 Pedestrian and Bicycle Facilities

The field survey indicates that there is a sidewalk in front of the Rivercrest at Narcoosse neighborhood on Lillian Lee Road. However, the other portion of this road does not have any sidewalk or bicycle lane. The proposed development will provide sidewalk along the Puffin Road.

8.2 Transit Facilities

The Central Florida bus service map was reviewed from the LYNX system website to determine the available transit route near the proposed development. Currently, the closest route to the proposed site is Lynx Route 612 that travels along Narcoossee Road as far north as Laureate Boulevard. The nearest bus stop for Route 612 is located approximately +/- 0.5-miles south of the site. The Central Florida bus service map is included in **Appendix L**.

9.0 STUDY CONCLUSIONS

This traffic analysis was conducted to assess the impact of the proposed Nona Townhomes development, which consists of 141 attached single family residential units (townhomes) with an expected buildout year of 2028. The project site is located at the southwest corner of Lillian Lee Road and Puffin Road in the City of St. Cloud, Florida. The analysis included a determination of project trip generation, a review of existing and projected roadway capacity, intersection capacity, and access driveways. The results of the traffic analysis are summarized as follows:

- The proposed development is projected to generate 1,024 new daily trips, of which 68 trips occur during the AM peak hour and 81 trips occur during the PM peak hour.

- Analysis of roadway segment capacity reveals that the following segments are projected to exceed the available capacity due to background traffic and the project impacts on these segments are considered insignificant.

    - Hickory Tree Road from US 192 to Nolte Road (project trips are 0.2% of the roadway capacity)
    - Narcoossee Road from Rummell Road to 10th Street (project trips are 0.6% of the roadway capacity)
    - Narcoossee Road from 10th Street to US 192 (project trips contribute 0.2% of the roadway capacity)

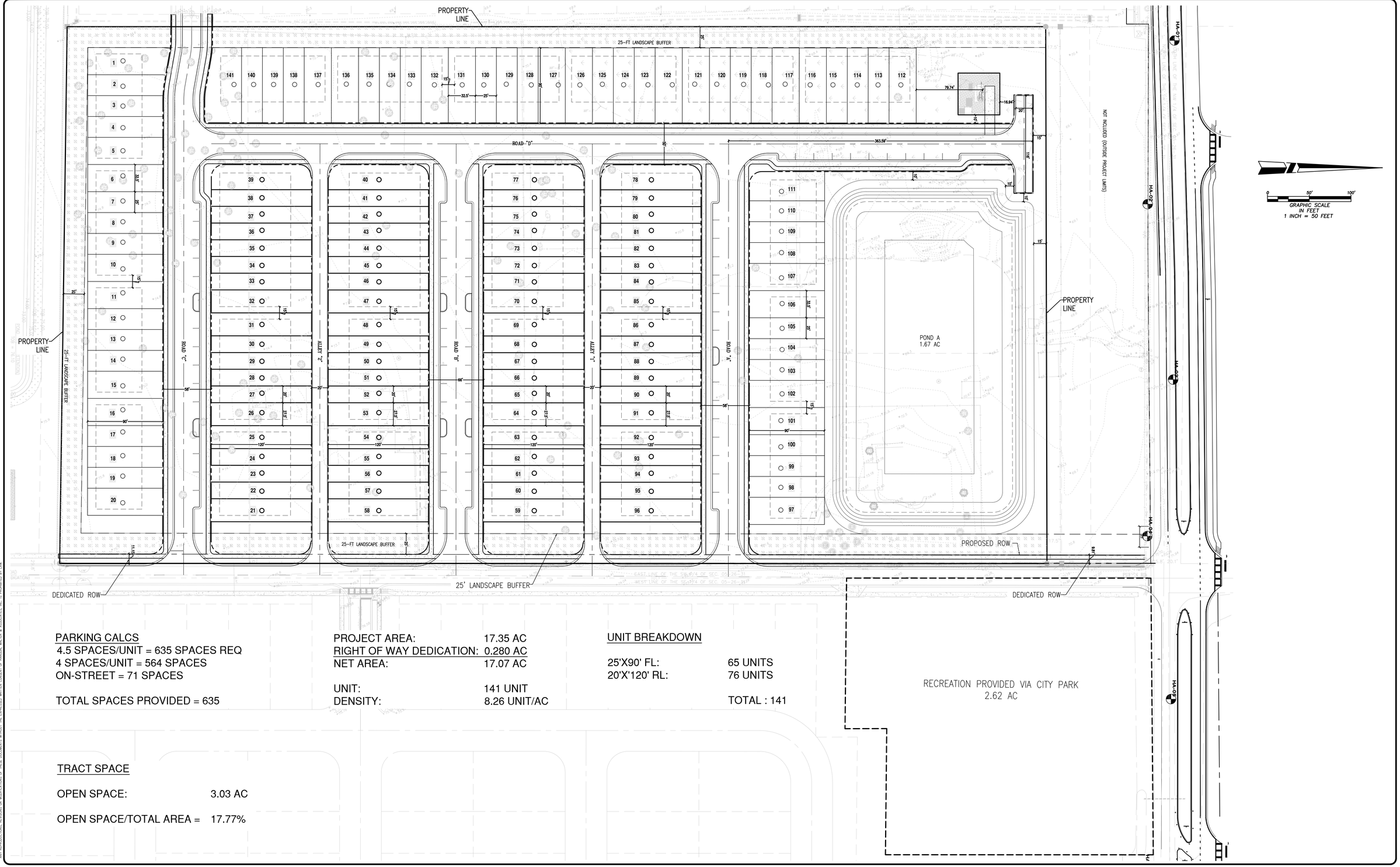
- All other roadway segments are projected to operate adequately at buildout.

- Some of the study intersections are currently operating with delays and are projected to continue to operate deficiently. The project traffic is not projected to adversely deteriorate traffic flow at these intersections as the project trips are less than 1% of the of the total intersection traffic.

- No auxiliary lanes are required at the project access driveways.

APPENDICES

Appendix A
Preliminary Site Plan



PARKING CALCS
4.5 SPACES/UNIT = 635 SPACES REQ
4 SPACES/UNIT = 564 SPACES
ON-STREET = 71 SPACES

TOTAL SPACES PROVIDED = 635

PROJECT AREA:	17.35 AC
RIGHT OF WAY DEDICATION:	0.280 AC
NET AREA:	17.07 AC
UNIT:	141 UNIT
DENSITY:	8.26 UNIT/AC

UNIT BREAKDOWN

25'X90' FL:	65 UNITS
20'X'120' RL:	76 UNITS
TOTAL :	141

TRACT SPACE

OPEN SPACE: 3.03 AC

OPEN SPACE/TOTAL AREA = 17.77%

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DESIGN –	F.B. NO. –	SEC. 05			
DRAWN –	PAGE –	TWP. 26			
CHECKED –	SCALE AS SHOWN	RANGE 31			
CAD# (see stamp)	DATE 5/1/24		DATE	BY	REVISIONS

8 BROADWAY, SUITE 104, KISSIMMEE, FLORIDA 34741-5708
PHONE: (407) 847-9433
ENGINEERING FAX: (321) 442-1045 SURVEY FAX: (407) 847-2499
ENG. CERT. OF AUTHOR. No. 3265/SUR. CERT. OF AUTHOR. No. 3270
ENGINEERING, SURVEYING AND PLANNING
Hanson, Walter & Associates, Inc.

1820, 1850 & 1860 PUFFIN ROAD

CONCEPT PLAN #3
(OFFSITE RECREATION)

SHEET NO
01 of 01
JOB NO 5557-01

I:\5557-01\ENGINEERING\CADD\PLANS\working\cnt\x-5557-01 CONCEPT PLAN (OFFSITE RECREATION) option #3.dwg * May 01, 2024 - 1:50pm * plotted by ADonato

Appendix B
Methodology Correspondence

Outlook

[Draft] **Fw: Nona Townhomes TIA Methodology**

From TarekH@trafficmobility.com
Draft saved Tue 11/5/2024 1:55 PM

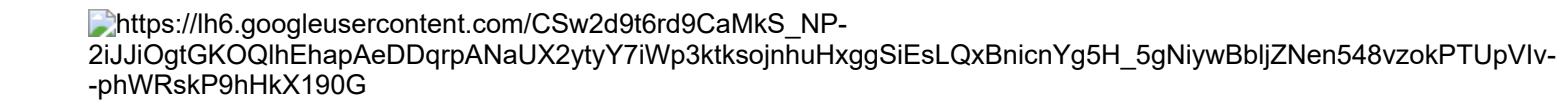
From: Cameron Crandell <cameron.crandell@stcloudfl.gov>
Sent: Friday, November 1, 2024 10:40 AM
To: Trace Raulerson <TraceR@trafficmobility.com>
Cc: Charlotte Davidson <CharlotteD@trafficmobility.com>; 24028-01 NONA TOWNHOMES <24028-01@trafficmobility.com>
Subject: RE: Nona Townhomes TIA Methodology

Trace,

Here are the comments on the Nona Townhomes Methodology. It is approved as noted:

Study Intersections:
1. Identify/specify each Project Access Road intersection on Puffin Road that will be evaluated.
2. Include Gold Crest Drive and Lillian Lee Rd intersection in the study.

Thank you,



Cameron Crandell, PE
Deputy Public Works Director
1300 9th Street
St. Cloud, FL 34769
P: 407-957-7279
Please note new email: cameron.crandell@stcloudfl.gov
www.StCloudFL.gov

Appendix A. – Methodology Form.

☐ 1. Project Name: Nona Townhomes

☐ 2. Project Description: 141 residential townhomes residential development located in the southwest corner of Lillian Lee Road and Puffin Road, in the city of St. Cloud, Florida.

☐ . Attach Location Map. If Tier 2, show 2-mile radius. See Attachments

☐ 4. Attach Site Plan. See Attachments

☐ 5. Buildout Year: 2028

☐ 6. TIA Tier: 2

☐ 7. AM and PM Peak Hour Trips: 68 AM and 81 PM Peak Hour Trips

☐ 8. ITE Land Use Code from the latest ITE manual: 215

☐ 9. ITE Time Period from the latest ITE manual: 7AM-9AM and 4PM-6PM

☐ 10. Attach Trip Generation Summary Table. See Attachments

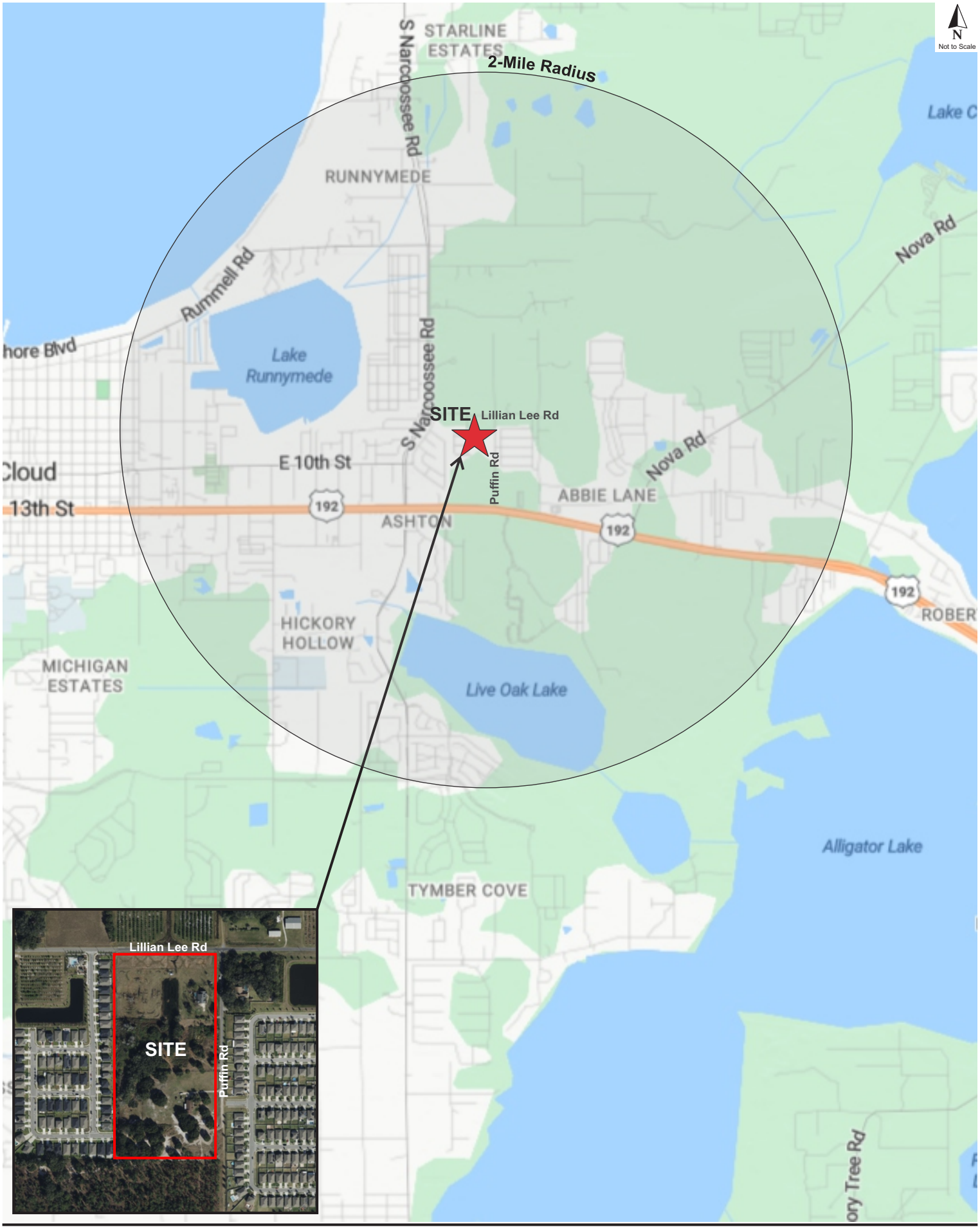
☐ 11. Travel Demand Model: See model plot and trip distribution in the Attachments

☐ 12. List of Intersections included in the TIA: See Attachments

☐ 13. List of Road segments to be included in the TIA: See Attachments

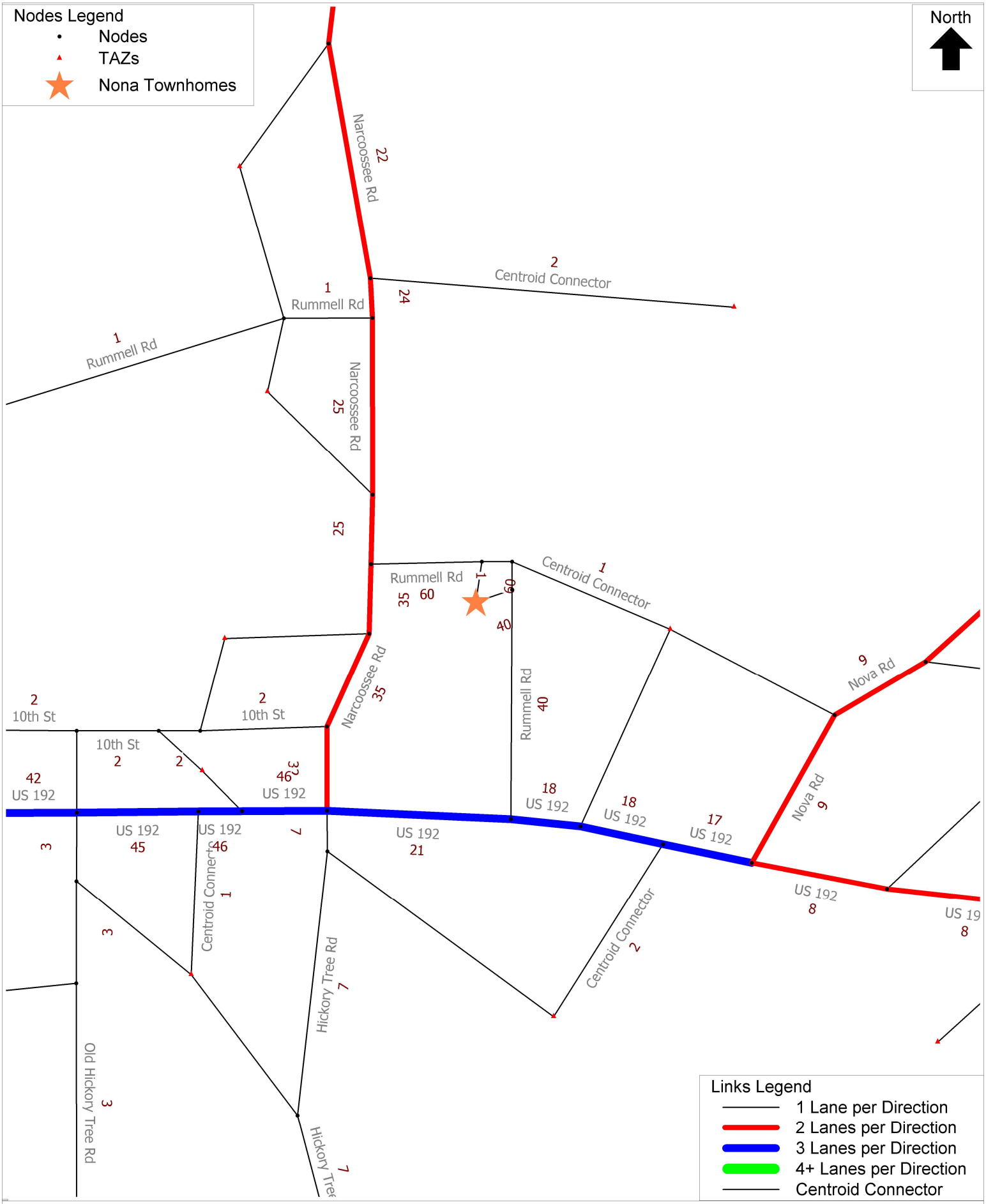
☐ 14. Planned and Programmed Improvements:

-Narcoossee Road and Lillian Lee Road signalization and westbound right turn lane.
-Puffin Road, Lillian Lee Road, and Nora Tyson Road are proposed to be improved to City standards.
-Signalization of US 192 and Puffin Road.
(See Attachments)


N
Not to Scale
STARLINE ESTATES
2-Mile Radius
S Narcoossee Rd
RUNNYMEDE
Rummell Rd
Lake Runnymede
Nova Rd
SITE
Lillian Lee Rd
E 10th St
Puffin Rd
ABBIE LANE
13th St
192
ASHTON
HICKORY HOLLOW
MICHIGAN ESTATES
Live Oak Lake
Alligator Lake
TYMBER COVE
Lillian Lee Rd
SITE
Puffin Rd

ITE Code	Land Use	Size	Daily		AM Peak Hour				PM Peak Hour			
			Rate	Trips	Rate	Total	Enter	Exit	Rate	Total	Enter	Exit
215	Single-Family Attached (Townhomes)	141 DU	7.26	1,024	0.48	68	17	51	0.57	81	48	33

Trip generation analysis based on ITE Trip Generation Manual, 11th Edition



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Project Trip Distributioin
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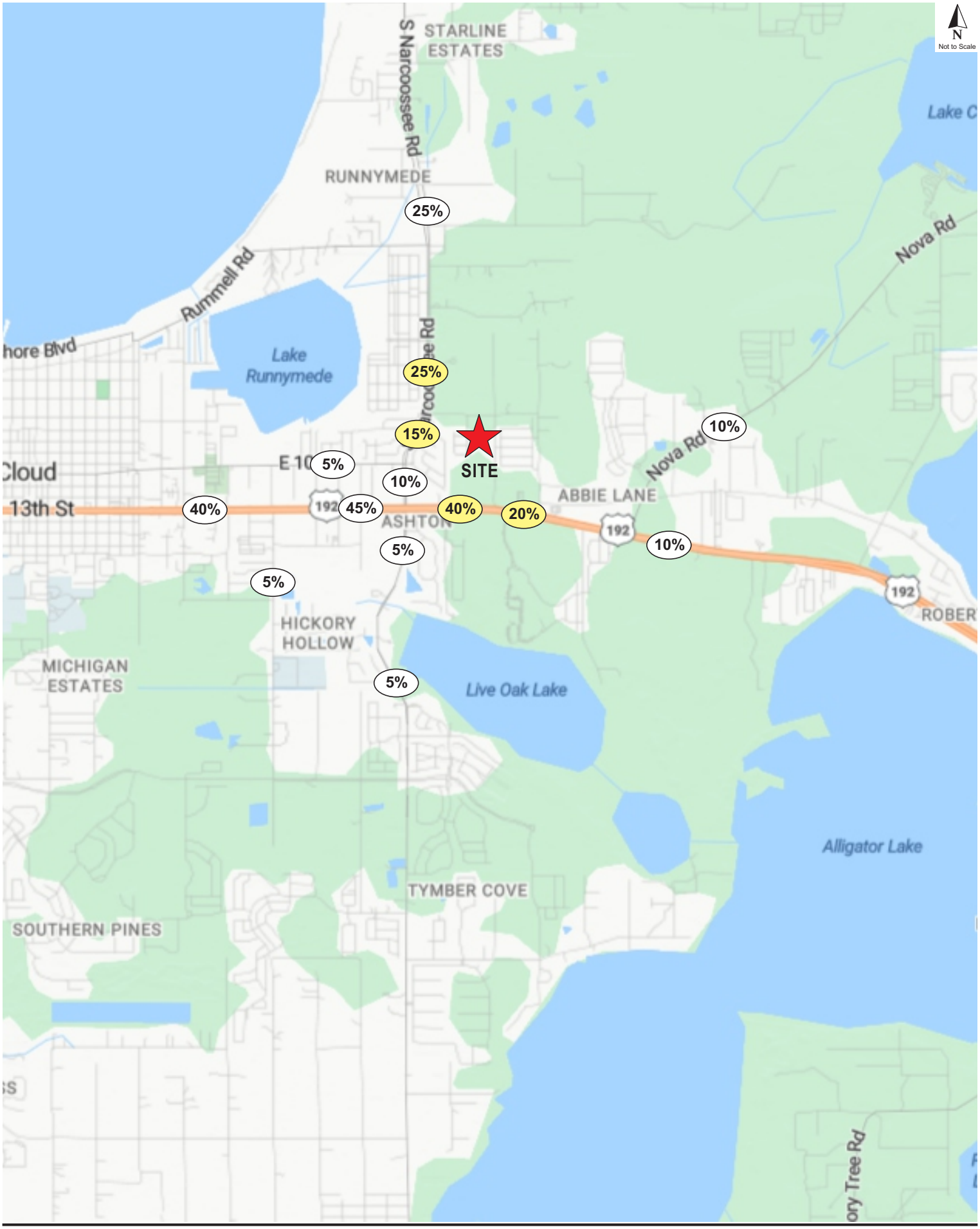
(Licensed to Traffic & Mobility Consultants, LLC)


N
Not to Scale
STARLINE ESTATES
S Narcoossee Rd
RUNNYMEDE
25%
Rummell Rd
Nova Rd
Lake Runnymede
25%
15%
SITE
10%
Nova Rd
5%
10%
13th St
40%
192
45%
ASHTON
40%
20%
ABBIE LANE
192
10%
5%
5%
192
HICKORY HOLLOW
MICHIGAN ESTATES
5%
Live Oak Lake
Alligator Lake
TYMBER COVE
SOUTHERN PINES

12. Study Intersections

- Narcoossee Road and Rummell Road (Signalized)
- Narcoossee Road and Lillian Lee Road (Unsignalized)
- Narcoossee Road and 10th Street (Signalized)
- Narcoossee Road and US 192-441 (Signalized)
- US 192-441 and Old Hickory Tree Road (Signalized)
- US 192-441 and Puffin Road (Future)
- US 192-441 and Nova Road (Signalized)
- Puffin Road and Project Access Driveways (Proposed)
- Gold Crest Drive and Project Cross Access (Proposed)

13. Study Roadways

- Hickory Tree Road
  - US 192 (West) to Nolte Road
- Lillian Lee Road
  - Narcoossee Road (CR 15) to Nora Tyson Road
- Narcoossee Road (CR 15)
  - Jones Road to Rummel Road
  - Rummel Road to 10th Street
  - 10th Street to US 192-441
- Nova Road (CR 532)
  - US 192-441 to Lake Lizzie Drive
  - Lake Lizzie Drive to Eden Drive
- Orange Avenue (St Cloud)
  - US 192-441 (13th Street) to Rummell Road
- Puffin Road
  - Lillian Lee Road to US 192
- Rummell Road
  - Mississippi Avenue to Narcoossee Road (CR 15)
- Tenth (10th) Street
  - Michigan Avenue to Narcoossee Road (CR 15)
- US 192-441
  - Columbia Avenue/Budinger Avenue to Mississippi Avenue
  - Mississippi Avenue to Narcoossee Road (CR 15)/Hickory Tree Road
  - Narcoossee Road (CR 15)/Hickory Tree Road to Nova Road (CR 532)
  - Nova Road (CR 532) to Old Melbourne Highway

Mitigation & Proportionate Share

- The following improvements are recommended to address traffic conditions at buildout:
  - New traffic signal and westbound right turn lane at Narcoossee Road and Lillian Lee Road
- Three (3) planned developments are responsible for the proportionate percentages of the improvements, as follows:

Location	Total Vol	Lakeside at Satilla		Tyson Reserve		The Exchange Apartments		Improvement
		Trips	% Total	Trips	% Total	Trips	% Total	
Lillian Lee Rd & Narcoossee Rd	93	27	29%	9	10%	9	10%	Add a westbound right turn lane
	3,851	260	7%	36	1%	23	1%	Add a signal

Roadway Improvements

- Puffin Road will be improved to City standards by The Exchange Apartments and constructed from Lillian Lee Road to US 192.
- Lillian Lee Road from Narcoossee Road to Nora Tyson Road will be improved by the Lakeside at Satilla development.
- Nora Tyson Road from Tyson Reserve Access to Fiddlewood Way, south of Lillian Lee Road, will be improved by the Tyson Reserve development.

The three developers are coordinating with the City to determine the necessary improvements.

Appendix C
Trip Generation Information

Single-Family Attached Housing
(215)

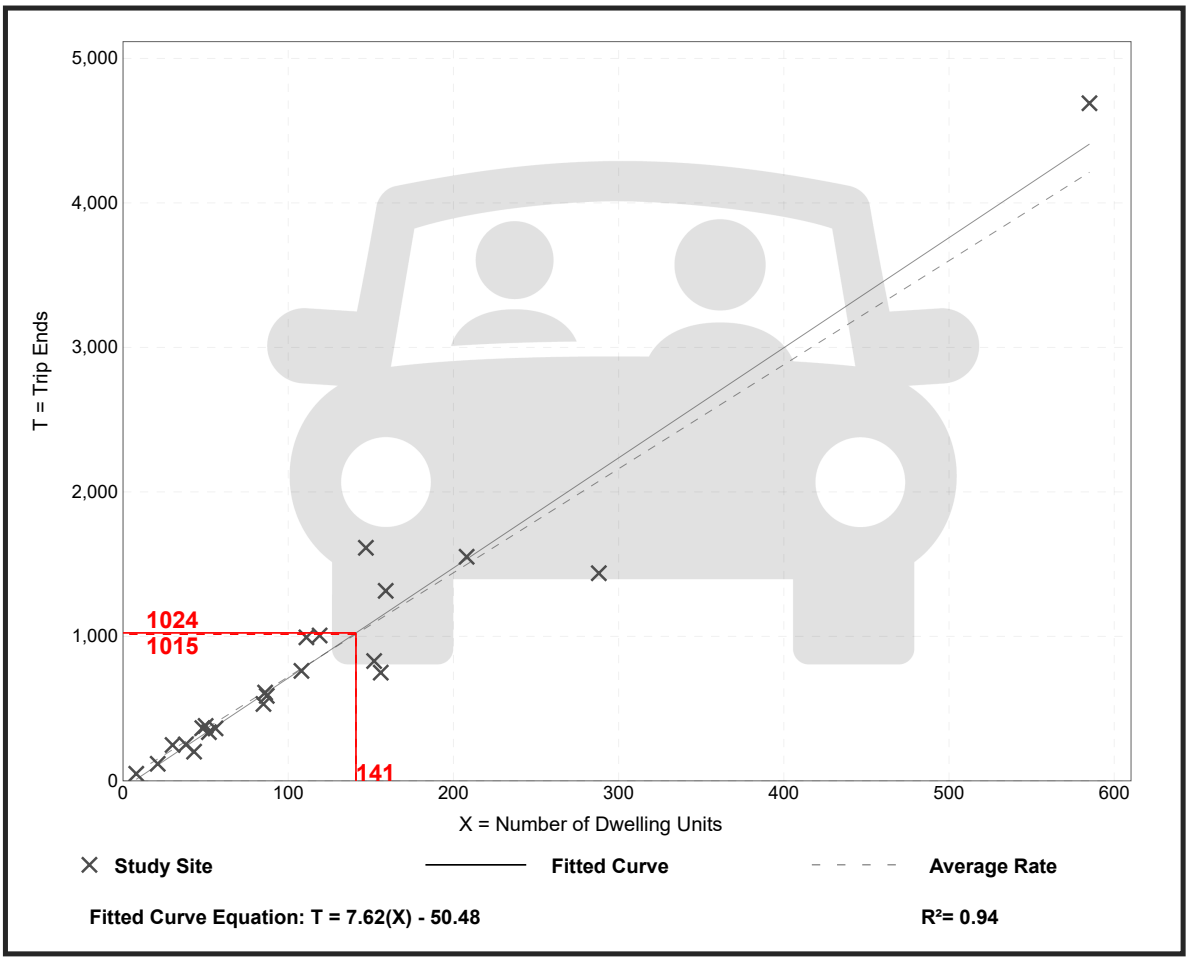
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 22
Avg. Num. of Dwelling Units: 120
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
7.20	4.70 - 10.97	1.61

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

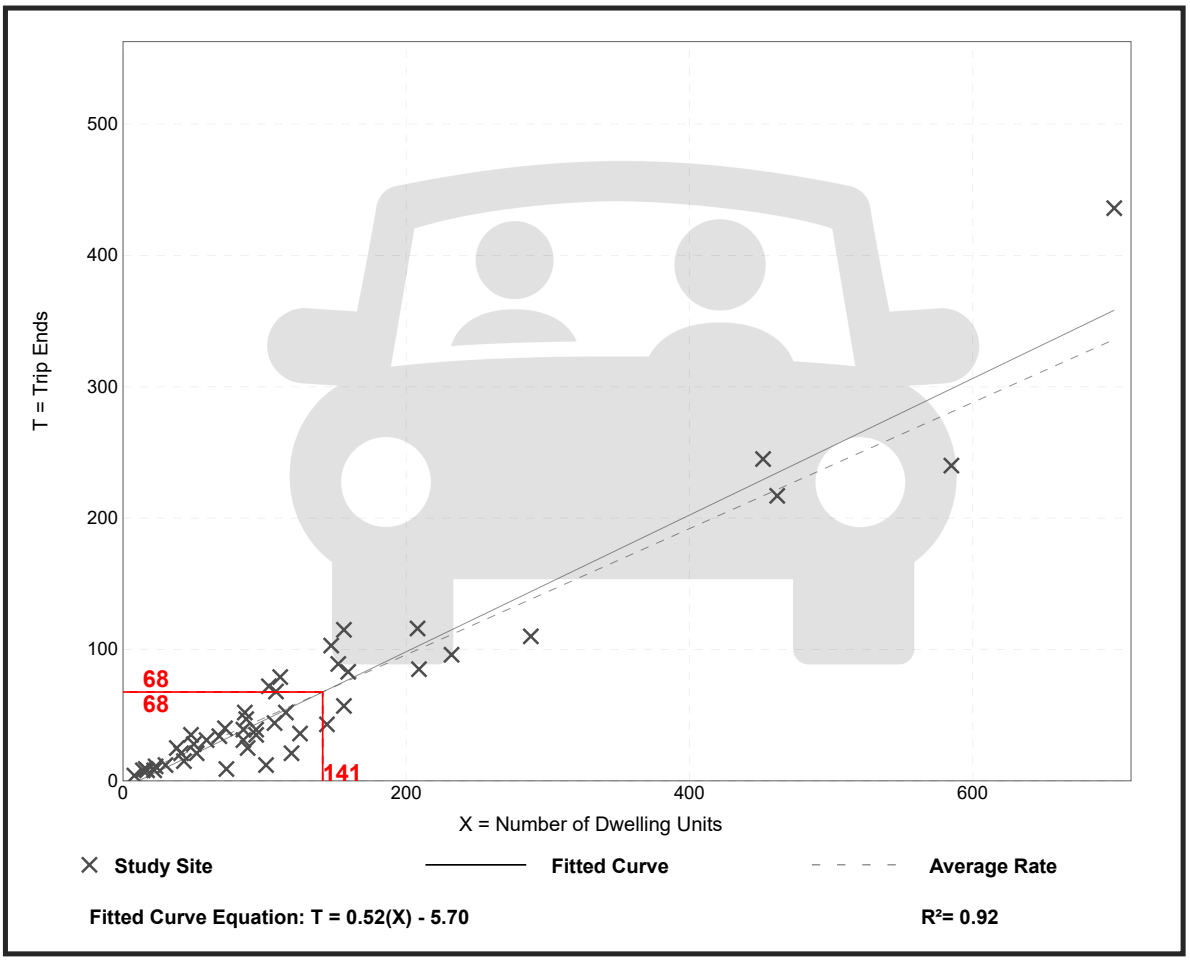
Single-Family Attached Housing
(215)

Vehicle Trip Ends vs:	**Dwelling Units**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	46
Avg. Num. of Dwelling Units:	135
Directional Distribution:	25% entering, 75% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.48	0.12 - 0.74	0.14

Data Plot and Equation



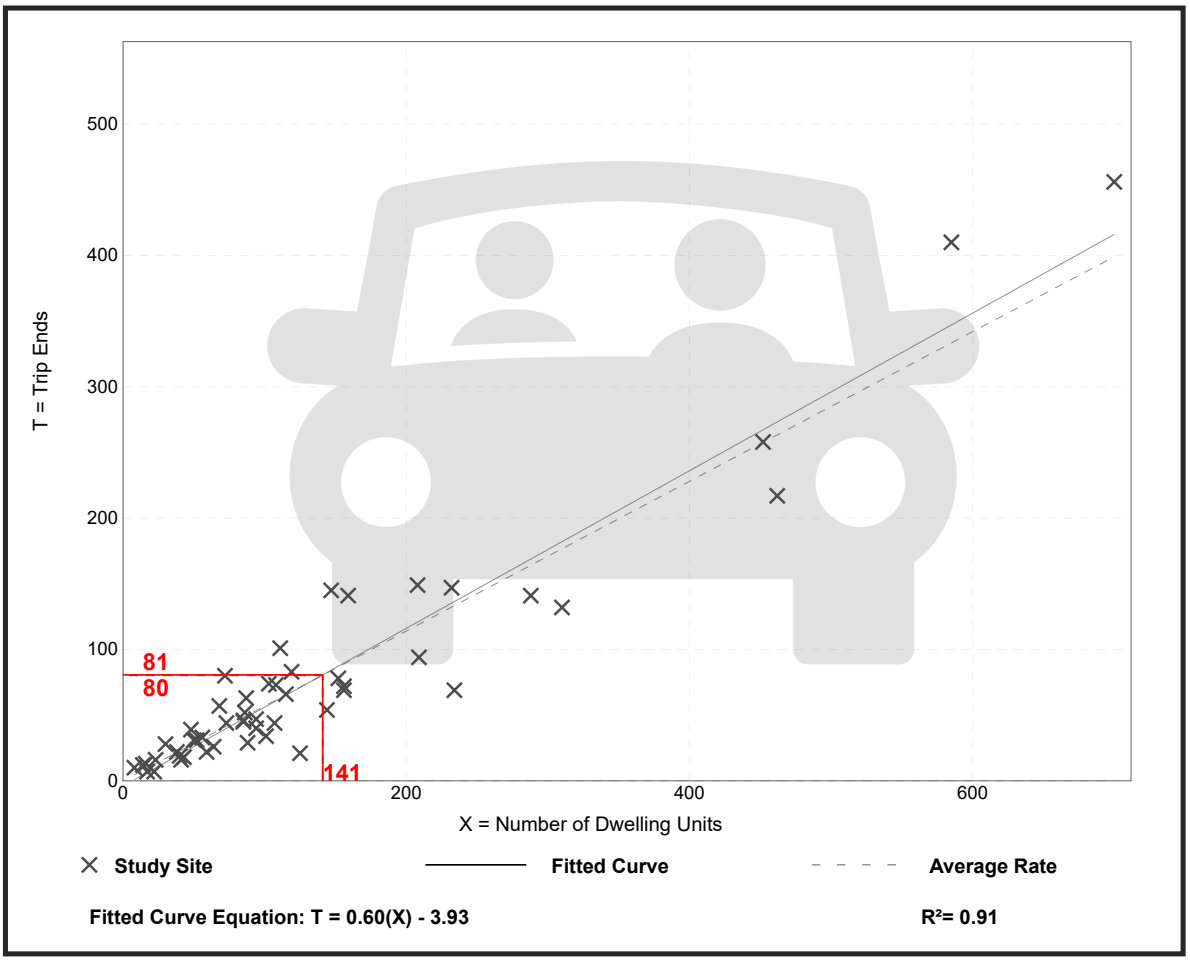
Single-Family Attached Housing
(215)

Vehicle Trip Ends vs:	**Dwelling Units**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	51
Avg. Num. of Dwelling Units:	136
Directional Distribution:	59% entering, 41% exiting

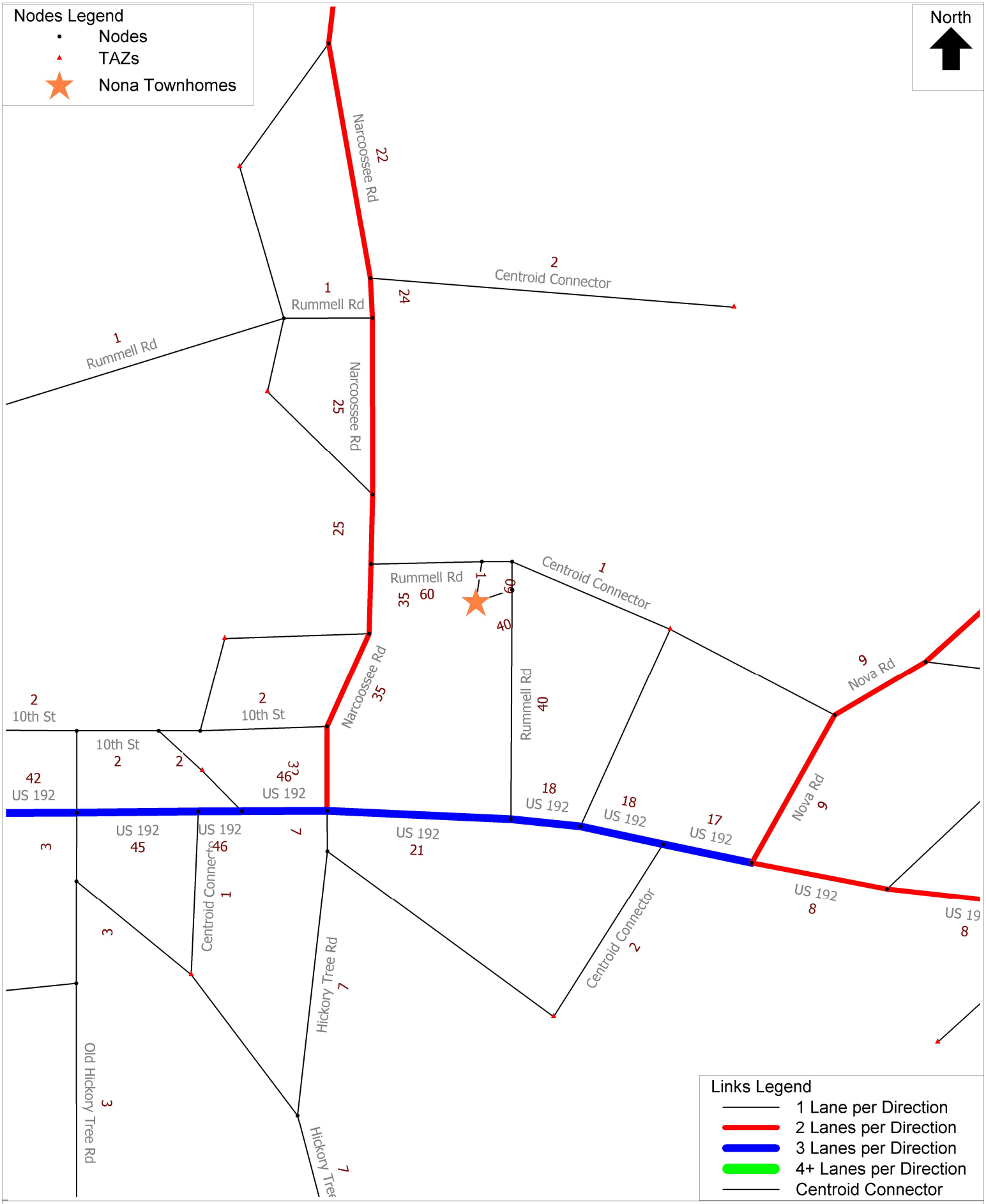
Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.57	0.17 - 1.25	0.18

Data Plot and Equation



Appendix D
CFRPM Model Output



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Project Trip Distributioin
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Appendix E
Osceola County 2024 Roadway Network Capacity Report

2024 Roadway Network Capacity Report
(Updated 05/14/2023)

Count Station #	Count Source	ROADWAY	FROM	TO	Area Type (U/T/R)	Facility Type	Functional Class	Adjusted Service Volumes				Latest Count Year	Count Date (mm/dd)	Week	ADT	AADT	PM Peak Hour									
								B	C	D	E						NB/EB	SB/WB	Pk Hr Total	Pk Dir	K-Factor	D-Factor	Pk Hr Pk Dir Vol	LOS	Capacity	V/C
544	OC	Bass Highway	Pine Grove Rd	End	U	A1	Collector	270	430	460	460	2012	3/27	13	2441	2392	123	92	215	NB/EB	0.0881	0.57	123	B	460	0.27
9009	OC	Absher Rd	Southern Terminus	Cyrils Dr	RD	A	Local	0	420	550	590	2024	3/27	13	210	206	12	9	21	NB/EB	0.1	0.57	12	C	420	0.03
9016	OC	Ball Park Rd	John Young Pkwy	Thacker Ave	U	A3	Collector	0	670	1500	1700	2024	4/2	14	14039	13758	435	598	1033	SB/WB	0.074	0.58	598	C	1500	0.4
177	OC	Bass Road	Yowell Rd	US 192	U	A1	Collector	480	770	830	830	2024	3/6	10	9653	9363	298	410	708	SB/WB	0.073	0.58	410	B	830	0.49
183	OC	Bella Citta Blvd	Oasis Club Blvd	Westside Blvd	U	A1	Collector	330	530	570	570	2024	2/27	9	13123	12729	532	463	995	NB/EB	0.076	0.53	532	D	570	0.93
184	OC	Bella Citta Blvd	Westside Blvd	S Goodman Rd	U	A1	Collector	330	530	570	570	2024	2/27	9	10639	10320	419	343	762	NB/EB	0.072	0.55	419	C	570	0.74
467	OC	Bill Beck Blvd	US 192-441	Fortune Rd	U	A2	Collector	0	1260	1670	1770	2024	3/6	10	5090	4937	362	262	624	NB/EB	0.123	0.58	362	C	1670	0.22
9015	OC	Bill Beck Blvd	Osceola Pkwy	Woodcrest Blvd	U	A1	Collector	540	860	920	920	2024	4/10	15	4894	4845	171	273	444	SB/WB	0.091	0.61	273	B	920	0.3
474	OC	Boggy Creek Rd (East)	Simpson Rd	Austin Tyndell Park	U	A1	Minor Art	480	770	830	830	Under Construction														
475	OC	Boggy Creek Rd (East)	Austin Tyndell Park	Narcoossee Rd (CR 15)	U	H	Minor Art	400	800	1140	1440	Under Construction														
9019	OC	Botanica Blvd	US 192-441	Crispin Cir	U	A1	Collector	1560	1890	1960	1960	2024	3/27	13	4691	4597	214	144	358	NB/EB	0.076	0.6	214	B	1960	0.11
2024	OC	Broad St	US 17/92	Old Tampa Hwy	U	A2	Collector	0	500	730	770	2024	4/2	14	6399	6271	236	335	571	SB/WB	0.089	0.59	335	C	730	0.46
510	OC	Brown Chapel Rd	US 192-441	Lakeshore Blvd	U	A1	Collector	500	810	870	870	2024	3/21	12	7958	7719	326	371	697	SB/WB	0.088	0.53	371	B	870	0.43
462	OC	Buenaventura Blvd	Simpson Rd	Florida Pkwy	U	A2	Minor Art	0	1260	1670	1770	2024	3/26	13	25845	25328	1137	909	2046	NB/EB	0.079	0.56	1137	C	1670	0.68
456	OC	Buenaventura Blvd	Florida Pkwy	Osceola Pkwy	U	A1	Minor Art	1470	1790	1850	1850	2024	3/27	13	33529	32858	1000	1559	2559	SB/WB	0.076	0.61	1559	C	1850	0.84
452	OC	Buenaventura Blvd	Osceola Pkwy	Orange County Line	U	A1	Minor Art	1470	1790	1850	1850	2024	3/27	13	36721	35987	1125	2095	3220	SB/WB	0.088	0.65	2095	F	1850	1.13
605	OC	Canoe Creek Rd (CR 523)	S 441/SR 15/Holopaw R	Sullivan Dr	RU	H	Major Coll	240	430	740	1480	2024	4/2	14	2771	2716	118	98	216	NB/EB	0.078	0.55	118	B	430	0.27
523	OC	Canoe Creek Rd (CR 523)	Sullivan Dr	Deer Run Rd	T	H	Minor Art	420	800	1120	1420	2024	3/20	12	6708	6507	307	267	574	NB/EB	0.086	0.53	307	B	800	0.38
522	OC	Canoe Creek Rd (CR 523)	Deer Run Rd	Old Canoe Creek Rd	U	A1	Minor Art	500	810	870	870	2024	4/2	14	22815	22359	1022	1070	2092	SB/WB	0.092	0.51	1070	F	870	1.23
508	OC	Canoe Creek Rd (CR 523)	Old Canoe Creek Rd	Nolte Rd	U	A1	Minor Art	500	810	870	870	2024	3/20	12	17039	16528	622	725	1347	SB/WB	0.079	0.54	725	C	870	0.83
521	OC	Canoe Creek Rd (CR 523)	Nolte Rd	US 192-441	U	A1	Minor Art	500	810	870	870	2024	3/20	12	16369	15878	554	719	1273	SB/WB	0.078	0.56	719	C	870	0.83
9012	OC	Canoe Creek Rd (CR 523)	Mildred Bass Rd	Florida's Turnpike	U	A1	Minor Art	370	590	630	630	2024	3/20	12	4780	4637	264	155	419	NB/EB	0.088	0.63	264	B	630	0.42
311	OC	Carroll St	Columbia Ave	Dyer Blvd	U	A1	Minor Art	1470	1790	1850	1850	2024	3/7	10	20227	19620	634	644	1278	SB/WB	0.063	0.5	644	B	1850	0.35
312	OC	Carroll St	Dyer Blvd	Thacker Ave	U	A1	Minor Art	1400	1700	1760	1760	2024	4/2	14	13227	12962	641	463	1104	NB/EB	0.083	0.58	641	B	1760	0.36
309	OC	Carroll St	Thacker Ave	John Young Pkwy	U	A1	Minor Art	1470	1790	1850	1850	2024	3/7	10	15941	15463	597	669	1266	SB/WB	0.079	0.53	669	B	1850	0.36
313	OC	Carroll St	John Young Pkwy	Main St/US 441-17/92	U	A1	Minor Art	500	810	870	870	2024	3/6	10	17846	17311	648	754	1402	SB/WB	0.079	0.54	754	C	870	0.87
314	OC	Carroll St	Main St/US 441-17/92	Old Dixie Hwy	U	A1	Minor Art	500	810	870	870	2024	3/6	10	12269	11901	560	458	1018	NB/EB	0.083	0.55	560	C	870	0.64
315	OC	Carroll St	Old Dixie Hwy	Michigan Ave	U	A1	Minor Art	1400	1700	1760	1760	2024	3/6	10	13218	12821	736	437	1173	NB/EB	0.089	0.63	736	B	1760	0.42
153	OC	Celebration Ave	US 192	Celebration Blvd	U	A3	Collector	0	630	1420	1610	2024	2/27	9	15465	15001	927	502	1429	NB/EB	0.092	0.65	927	D	1420	0.65
154	OC	Celebration Blvd	Celebration Pl	World Dr	U	A1	Collector	1470	1790	1850	1850	2024	2/27	9	17713	17182	646	938	1584	SB/WB	0.089	0.59	938	B	1850	0.51
122	OC	Champions Gate Blvd	Polk County Line	I-4	U	A3	Collector	0	630	1420	1610	2024	2/27	9	35297	34238	1144	1293	2437	SB/WB	0.069	0.53	1293	D	1420	0.91
304	OC	Clay St	Jack Calhoun Dr	Thacker Ave	U	A1	Collector	460	740	790	790	2024	2/21	8	17626	17273	593	798	1391	SB/WB	0.079	0.57	798	F	790	1.01
303	OC	Clay St	Thacker Ave	Randolph Ave	U	A1	Collector	370	590	630	630	2024	2/21	8	8366	8199	231	575	806	SB/WB	0.096	0.71	575	C	630	0.91
537	OC	Creek Woods Dr	Canoe Creek Rd	Michigan Ave	U	A1	Collector	480	770	830	830	2024	3/20	12	3704	3593	179	145	324	NB/EB	0.087	0.55	179	B	830	0.22
2025	OC	Cross Prairie Pkwy	Neptune Rd	Partin Settlement Rd	U	A2	Collector	0	1140	1510	1600	2024	3/26	13	13697	13423	403	625	1028	SB/WB	0.075	0.61	625	C	1510	0.41
9006	OC	Cross Prairie Pkwy	Neptune Rd	Partin Terrace Rd	U	A1	Collector	1470	1790	1850	1850	2024	3/26	13	13039	12778	350	640	990	SB/WB	0.076	0.65	640	B	1850	0.35
9007	OC	Cross Prairie Pkwy	US 192	Turnpike Ramps	U	A2	Collector	0	1260	1670	1770	2024	3/26	13	32058	31417	1028	1104	2132	SB/WB	0.067	0.52	1104	C	1670	0.66
222	OC	Cypress Pkwy	Marigold Ave	Pleasant Hill Rd	U	A1	Minor Art	1470	1790	1850	1850	2024	4/2	14	43927	43048	1401	1452	2853	SB/WB	0.065	0.51	1452	B	1850	0.78
9000	OC	Cypress Pkwy	Poinciana Pkwy	Marigold Ave	U	A1	Local	480	770	830	830	2024	2/28	9	17369	16848	725	604	1329	NB/EB	0.077	0.55	725	C	830	0.87
1001	OC	Cyrils Dr	Narcoossee Rd	Zuni Rd	U	A1	Collector	370	590	630	630	2024	4/3	14	13015	12755	556	403	959	NB/EB	0.074	0.58	556	C	630	0.88
1002	OC	Cyrils Dr	Zuni Rd	Absher Rd	U	A1	Collector	370	590	630	630	2024	4/3	14	9532	9341	323	358	681	SB/WB	0.071	0.53	358	B	630	0.57
552	OC	Cyrils Dr	Narcoossee Rd (CR 15)	Absher Rd	T	A1	Local	340	540	580	580	2009	4/14	16	1112	1101	68	34	102	NB/EB	0.092	0.67	68	B	540	0.13
9001	OC	Cyrils Dr	East of Absher Rd		U	A1	Local	1470	1790	1850	1850	2024	4/3	14	5359	5252	251	207	458	NB/EB	0.085	0.55	251	B	1850	0.14
602	OC	Deer Park Rd (CR 419)	US 192	Nova Rd (CR 532)	RU	H	Collector	240	430	740	1480	2009	4/15	16	463	458	24	24	48	NB/EB	0.104	0.5	24	B	430	0.06
2022	OC	Deer Park Rd	US 192	Gator Branch Rd	RU	H	Collector	240	430	740	1480	2024	4/3	14	2336	2289	91	110	201	SB/WB	0.086	0.55	110	B	430	0.26
2021	OC	Deer Park Rd	Gator Branch Rd	Nova Rd (CR 532)	RU	H	Collector	240	430	740	1480	2024	3/28	13	2912	2854	105	156	261	SB/WB	0.09	0.6	156	B	430	0.36
524	OC	Deer Run Rd	Canoe Creek Rd (CR 523	Hickory Tree Rd	U	H	Minor Art	400	800	1140	1440	2024	3/20	12	5682	5512	292	179	471	NB/EB	0.083	0.62	292	B	1140	0.26
352	OC	Donegan Ave	John Young Pkwy	US 17/92	U	A2	Collector	0	550	800	850	2024	3/6	10	11748	11396	436	506	942	SB/WB	0.08	0.54	506	C	800	0.63
353	OC	Donegan Ave	US 17/92	Michigan Ave	U	A1	Collector	500	810	870	870	2024	3/6	10	13508	13103	650	473	1123	NB/EB	0.083	0.58	650	C	870	0.75
224	OC	Doverplum Ave	Old Pleasant Hill Rd	Cypress Pkwy	U	A1	Collector	460	740	790	790	2024	2/27	9	7798	7564	296	260	556	NB/EB	0.071	0.53	296	B	790	0.37
223	OC	Doverplum Ave	Cypress Pkwy	KOA St	U	A1	Collector	480	770	830	830	2024	2/28	9	24035	23314	759	912	1671	SB/WB	0.07	0.55	912	F	830	1.1
555	OC	Eden Dr	Nova Rd (CR 532)	End	U	A1	Collector	270	430	460	460	2009	4/15	16	1284	1271	80	31	111	NB/EB	0.0864	0.72	80	B	460	0.17
229	OC	Enterprise Dr/Mercantile Ln	Poinciana Blvd	Cattle Dr	U	A1	Collector	370	590	630	630	2024	2/21	8	2478	2428	91	129	220	SB/WB	0.089	0.59	129	B	630	0.2
9005	OC	Entry Point Blvd	Funie Steed Rd	US 192	U	A3	Local	0	260	600	750	2024	3/20	12	8503	8248	326	214	540	NB/EB	0.064	0.6	326	D	600	0.54

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520	OC	Fifth St (St Cloud)	Old Canoe Creek Rd	Vermont Ave	U	A1	Collector	350	560	600	600	2024	3/20	12	3407	3305	194	104	298	NB/EB	0.087	0.65	194	B	600	0.32
109	OC	Florence Villa Grove Rd	Polk County Line	Westside Blvd	U	A1	Collector	460	740	790	790	2024	2/27	9	10390	10078	340	419	759	SB/WB	0.073	0.55	419	B	790	0.53
453	OC	Florida Pkwy	Osceola Pkwy	Buenaventura Blvd	U	A1	Collector	330	530	570	570	2024	3/27	13	5376	5268	182	268	450	SB/WB	0.084	0.6	268	B	570	0.47
972000	FDOT	Florida's Turnpike	Osceola Pkwy	US 192-441	U	F	Freeway	2200	3020	3720	4020	2023	N/A	N/A	N/A	87000	N/A		N/A	N/A	N/A	N/A	N/A	N/A	3720	NA
972110	FDOT	Florida's Turnpike	US 192/441	Kissimmee Park Rd	U	F	Freeway	2200	3020	3720	4020	2023	N/A	N/A	N/A	57500	N/A		N/A	N/A	N/A	N/A	N/A	N/A	3720	NA
972108	FDOT	Florida's Turnpike	Kissimmee Park Rd	Indian River County	RU	F	Freeway	2100	2880	3400	3600	2023	N/A	N/A	N/A	37000	N/A		N/A	N/A	N/A	N/A	N/A	N/A	2880	NA
972001	FDOT	Florida's Turnpike	Orange County Line	Osceola Pkwy	U	F	Freeway	2200	3020	3720	4020	2023	N/A	N/A	N/A	109000	N/A		N/A	N/A	N/A	N/A	N/A	N/A	3720	NA
119	OC	Formosa Gardens Blvd	Sinclair Rd	Funie Steed Rd	U	H	Collector	400	800	1140	1440	2024	2/27	9	7575	7348	286	399	685	SB/WB	0.09	0.58	399	B	1140	0.35
117	OC	Formosa Gardens Blvd	Funie Steed Rd	US 192	U	A1	Collector	1470	1790	1850	1850	2024	2/27	9	10191	9885	430	503	933	SB/WB	0.092	0.54	503	B	1850	0.27
9013	OC	Formosa Gardens Blvd	Funie Steed Rd	Sand Hill Rd	U	A1	Collector	500	810	870	870	2024	2/27	9	6650	6451	273	338	611	SB/WB	0.092	0.55	338	B	870	0.39
9014	OC	Formosa Gardens Blvd	Sand Hill Rd	Sinclair Rd	U	A1	Collector	370	590	630	630	2024	2/27	9	5785	5611	216	299	515	SB/WB	0.089	0.58	299	B	630	0.47
469	OC	Fortune Rd	US 192-441	Simpson Rd	U	A2	Collector	0	1260	1670	1770	2024	3/6	10	32013	31053	1421	1089	2510	NB/EB	0.078	0.57	1421	D	1670	0.85
414	OC	Fortune Rd	Simpson Rd	Lakeshore Blvd	U	H	Collector	420	840	1200	1510	2024	4/3	14	15805	15489	453	843	1296	SB/WB	0.082	0.65	843	D	1200	0.7
561	OC	Friars Cove Rd	Florida's Turnpike	Canoe Creek Rd (CR 523)	U	A1	Collector	280	450	490	490	2024	3/20	12	4495	4360	154	225	379	SB/WB	0.084	0.59	225	B	490	0.46
118	OC	Funie Steed Rd	Westside Blvd	Formosa Gardens Blvd	U	H	Collector	400	800	1140	1440	2024	4/3	14	11816	11580	309	571	880	SB/WB	0.074	0.65	571	C	1140	0.5
112	OC	Funie Steed Rd	Formosa Gardens Blvd	Old Lake Wilson Rd	U	A1	Collector	350	560	600	600	2024	4/2	14	8424	8256	212	337	549	SB/WB	0.065	0.61	337	B	600	0.56
126	OC	Goodman Rd	Westside Blvd	Monaco Blvd	U	A1	Collector	330	530	570	570	2024	2/27	9	4839	4694	139	336	475	SB/WB	0.098	0.71	336	C	570	0.59
1261	OC	Goodman Rd	Monaco Blvd	Happy Trl	U	A1	Collector	460	740	790	790	2024	2/27	9	4814	4670	362	132	494	NB/EB	0.103	0.73	362	B	790	0.46
232	OC	Ham Brown Rd	Reaves Rd	Cattle Drive Ln	U	H	Collector	400	800	1140	1440	2024	4/2	14	11689	11455	301	687	988	SB/WB	0.085	0.7	687	C	1140	0.6
203	OC	Ham Brown Rd	Cattle Drive Ln	US 17/92	U	H	Collector	400	800	1140	1440	2024	2/21	8	14632	14339	309	710	1019	SB/WB	0.07	0.7	710	C	1140	0.62
407	OC	Henry Partin Rd	Kings Hwy	Neptune Rd	U	A1	Local	330	530	570	570	2012	3/27	13	4643	4550	135	254	389	SB/WB	0.0838	0.65	254	B	570	0.45
540	OC	Hickory Tree Rd	US 192 (West)	Nolte Rd	U	A1	Minor Art	500	810	870	870	2024	3/21	12	17047	16536	529	867	1396	SB/WB	0.082	0.62	867	D	870	1
548	OC	Hickory Tree Rd	Nolte Rd	Deer Run Rd	U	H	Minor Art	400	800	1140	1440	2024	3/20	12	15762	15289	605	609	1214	SB/WB	0.077	0.5	609	C	1140	0.53
531	OC	Hickory Tree Rd	Deer Run Rd	US 192 (East)	T	H	Collector	420	800	1120	1420	2024	3/20	12	4162	4037	172	209	381	SB/WB	0.092	0.55	209	B	800	0.26
23	OC	Hoagland Blvd	US 17/92	US 192	U	A1	Minor Art	1470	1790	1850	1850	2024	2/21	8	22083	21641	569	1058	1627	SB/WB	0.074	0.65	1058	B	1850	0.57
9002	OC	Hoagland Blvd	US 1792	Jack Calhoun Dr N	U	A1	Minor Art	1470	1790	1850	1850	2024	2/21	8	15419	15111	733	411	1144	NB/EB	0.074	0.64	733	B	1850	0.4
302	OC	Jack Calhoun Dr	N Hoagland Blvd	S Hoagland Blvd	U	A1	Minor Art	480	770	830	830	2024	2/21	8	4479	4389	204	138	342	NB/EB	0.076	0.6	204	B	830	0.25
152	OC	International Drive South	US 192	Orange County Line	U	A1	Collector	2270	2700	2780	2780	2024	2/27	9	17315	16796	886	557	1443	NB/EB	0.083	0.61	886	B	2780	0.32
160111	FDOT	Interstate 4	ceola Polk Line Rd (CR 5	SR 429	U	F	Freeway	3300	4580	5580	6200	2023	N/A	N/A	N/A	128000	N/A		N/A	N/A	N/A	N/A	N/A	N/A	5580	NA
920321	FDOT	Interstate 4	SR 429	World Dr	U	F	Freeway	3300	4580	5580	6200	2023	N/A	N/A	N/A	777000	N/A		N/A	N/A	N/A	N/A	N/A	N/A	5580	NA
920316	FDOT	Interstate 4	World Dr	US 192	U	F	Freeway	3300	4580	5580	6200	2023	N/A	N/A	N/A	106500	N/A		N/A	N/A	N/A	N/A	N/A	N/A	5580	NA
750668	FDOT	Interstate 4	US 192	Orange County Line	U	F	Freeway	3300	4580	5580	6200	2023	N/A	N/A	N/A	123000	N/A		N/A	N/A	N/A	N/A	N/A	N/A	5580	NA
553	OC	Jack Brack Rd	Narcoossee Rd (CR 15)	Zuni Rd	T	A1	Local	440	710	760	760	2024	4/3	14	8706	8532	378	206	584	NB/EB	0.067	0.65	378	B	710	0.53
5531	OC	Jack Brack Rd	Zuni Rd	Absher Rd	U	A1	Collector	370	590	630	630	2024	3/27	13	3070	3009	123	131	254	SB/WB	0.083	0.52	131	B	630	0.21
318	OC	John Young Pkwy	US 192	Columbia Ave	U	A1	Principal Art	2270	2700	2780	2780	2024	2/21	8	44268	43383	1470	1610	3080	SB/WB	0.07	0.52	1610	B	2780	0.58
317	OC	John Young Pkwy	Columbia Ave	Carroll St	U	A1	Principal Art	2270	2700	2780	2780	2024	2/21	8	45397	44489	1450	1725	3175	SB/WB	0.07	0.54	1725	B	2780	0.62
316	OC	John Young Pkwy	Carroll St	Orange County Line	U	A1	Principal Art	2270	2700	2780	2780	2024	3/7	10	48415	46963	1739	1809	3548	SB/WB	0.073	0.51	1809	B	2780	0.65
554	OC	Jones Rd	Narcoossee Rd	Gerry Ct	U	A1	Collector	330	530	570	570	2024	3/27	13	11037	10816	484	338	822	NB/EB	0.074	0.59	484	C	570	0.85
405	OC	Kings Hwy	Pine Island Rd	Neptune Rd	U	H	Collector	400	800	1140	1440	2024	4/3	14	8213	8049	169	461	630	SB/WB	0.077	0.73	461	C	1140	0.4
505	OC	Kissimmee Park Rd	Old Canoe Creek Rd	Lake Tohopekaliga	T	H	Collector	420	800	1120	1420	2024	3/20	12	2540	2464	102	130	232	SB/WB	0.091	0.56	130	B	800	0.16
9008	OC	Kissimmee Park Rd	Cross Prairie Pkwy	Turnpike	T	H	Collector	420	800	1120	1420	2024	4/2	14	4094	4012	223	115	338	NB/EB	0.083	0.66	223	B	800	0.28
226	OC	KOA St	Rhododendron Ave	Marigold Ave	U	A1	Collector	480	770	830	830	2024	2/28	9	12592	12214	551	492	1043	NB/EB	0.083	0.53	551	C	830	0.66
227	OC	KOA St	Marigold Ave	Doverplum Ave	U	A1	Collector	390	630	670	670	2024	2/28	9	16891	16384	590	588	1178	NB/EB	0.07	0.5	590	C	670	0.88
416	OC	Lakeshore Blvd	Fortune Rd	Partin Settlement Rd	U	H	Collector	400	800	1140	1440	2024	3/26	13	15430	15121	493	675	1168	SB/WB	0.076	0.58	675	C	1140	0.59
417	OC	Lakeshore Blvd	Partin Settlement Rd	Brown Chapel Rd	U	H	Collector	400	800	1140	1440	2024	4/2	14	17617	17265	842	973	1815	SB/WB	0.103	0.54	973	D	1140	0.85
516	OC	Lakeshore Blvd	Brown Chapel Rd	Mississippi Ave	U	H	Collector	400	800	1140	1440	2024	4/2	14	12206	11962	572	520	1092	NB/EB	0.089	0.52	572	C	1140	0.5
2023	OC	Laurel Ave	KOA St	Marigold Ave	U	H	Collector	400	800	1140	1440	2024	3/28	13	2118	2076	66	118	184	SB/WB	0.087	0.64	118	B	1140	0.1
225	OC	Marigold Ave	Cypress Pkwy	KOA St	U	A1	Collector	500	810	870	870	2024	4/2	14	13719	13445	478	554	1032	SB/WB	0.075	0.54	554	C	870	0.64
230	OC	Marigold Ave	KOA St	Poinciana Pkwy	U	A1	Collector	460	740	790	790	2024	4/2	14	18973	18594	539	972	1511	SB/WB	0.08	0.64	972	F	790	1.23
121	OC	Masters Blvd/Goodman Rd	Champions Gate Blvd	Bella Citta Blvd	U	A1	Collector	480	770	830	830	2024	2/27	9	14549	14113	733	570	1303	NB/EB	0.09	0.56	733	C	830	0.88
9010	OC	McMichael Rd	Northern Terminus	Jack Brack Rd	RD	A	Local	0	420	550	590	2024	3/27	13	268	263	16	11	27	NB/EB	0.101	0.59	16	C	420	0.04
335	OC	Michigan Ave (CR 531)	US 192-441	Donegan Ave	U	A1	Minor Art	1470	1790	1850	1850	2024	3/6	10	31101	30168	1134	1199	2333	SB/WB	0.075	0.51	1199	B	1850	0.65
334	OC	Michigan Ave (CR 531)	Donegan Ave	Carroll St	U	A1	Minor Art	1470	1790	1850	1850	2024	3/6	10	36554	35457	1262	1545	2807	SB/WB	0.077	0.55	1545	C	1850	0.84
333	OC	Michigan Ave (CR 531)	Carroll St	Osceola Pkwy	U	A2	Minor Art	0	1260	1670	1770	2024	3/6	10	34009	32989	1271	1223	2494	NB/EB	0.073	0.51	1271	D	1670	0.76
556	OC	Michigan Ave (St Cloud)	Lakeshore Blvd	US 192-441	U	A1	Collector	270	430	460	460	2024	3/21	12	2370	2299	97	138	235	SB/WB	0.099	0.59	138	B	460	0.3
518	OC	Michigan Ave (St Cloud)	US 192	Nolte Rd	U	H	Collector	400	800	1140	1440	2024	3/21	12	6569	6372	227	360	587	SB/WB	0.089	0.61	360	B	1140	0.32

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534	OC	Michigan Ave (St Cloud)	Nolte Rd	Creek Woods Dr	U	H	Collector	400	800	1140	1440	2024	4/2	14	3782	3706	183	151	334	NB/EB	0.088	0.55	183	B	1140	0.16
551	OC	Narcoossee Rd (CR 15)	Orange County Line	Jones Rd	U	A1	Principal Art	1470	1790	1850	1850	2024	4/2	14	39305	38519	1194	1719	2913	SB/WB	0.074	0.59	1719	C	1850	0.93
539	OC	Narcoossee Rd (CR 15)	Jones Rd	Rummel Rd	U	H	Principal Art	1770	2560	3320	3760	2024	3/21	12	39355	38174	1439	1783	3222	SB/WB	0.082	0.55	1783	C	3320	0.54
541	OC	Narcoossee Rd (CR 15)	Rummel Rd	10th St	U	A1	Principal Art	1470	1790	1850	1850	2024	3/21	12	35767	34694	1296	1509	2805	SB/WB	0.078	0.54	1509	C	1850	0.82
589	OC	Narcoossee Rd (CR 15)	10th St	US 192-441	U	A1	Principal Art	1470	1790	1850	1850	2024	4/2	14	38575	37804	1495	1724	3219	SB/WB	0.083	0.54	1724	C	1850	0.93
364	OC	Neptune Rd	Broadway Ave/Main St	Lakeshore Blvd	U	A1	Minor Art	1400	1700	1760	1760	2024	3/28	13	23268	22803	1121	698	1819	NB/EB	0.078	0.62	1121	B	1760	0.64
363	OC	Neptune Rd	Lakeshore Blvd	Kings Hwy	U	A1	Minor Art	1470	1790	1850	1850	2024	4/10	15	33650	33314	1740	999	2739	NB/EB	0.081	0.64	1740	C	1850	0.94
401	OC	Neptune Rd	Kings Hwy	Partin Settlement Rd	U	A1	Minor Art	1400	1700	1760	1760	2024	3/26	13	31511	30881	1407	1070	2477	NB/EB	0.079	0.57	1407	C	1760	0.8
501	OC	Neptune Rd	Partin Settlement Rd	Old Canoe Creek Rd	U	A1	Minor Art	480	770	830	830	2024	4/3	14	23030	22569	905	643	1548	NB/EB	0.067	0.58	905	F	830	1.09
502	OC	Neptune Rd	Old Canoe Creek Rd	US 192-441	U	A2	Minor Art	0	530	770	810	2024	3/21	12	11873	11517	475	440	915	NB/EB	0.077	0.52	475	C	770	0.62
530	OC	Nolte Rd	Old Canoe Creek Rd	Canoe Creek Road (CR 523)	U	A1	Collector	1470	1790	1850	1850	2024	3/20	12	19502	18917	982	597	1579	NB/EB	0.081	0.62	982	B	1850	0.53
NA3	OC	Nolte Rd	anoe Creek Road (CR 52	Michigan Ave	U	A1	Collector	1470	1790	1850	1850	2024	3/20	12	20291	19682	824	722	1546	NB/EB	0.076	0.53	824	B	1850	0.45
NA4	OC	Nolte Rd	Michigan Ave	Hickory Tree Rd	U	A1	Collector	1470	1790	1850	1850	2024	3/20	12	18495	17940	759	701	1460	NB/EB	0.079	0.52	759	B	1850	0.41
9011	OC	Nova Rd (CR 532)	US 192	Lake Lizzie Dr	U	H	Collector	400	800	1140	1440	2024	3/20	12	9731	9439	423	368	791	NB/EB	0.081	0.53	423	C	1140	0.37
542	OC	Nova Rd (CR 532)	Lake Lizzie Dr	Eden Dr	U	H	Collector	400	800	1140	1440	2024	3/27	13	5786	5670	205	299	504	SB/WB	0.087	0.59	299	B	1140	0.26
1003	OC	Nova Rd (CR 532)	Eden Dr	Orange County Line	RU	H	Collector	240	430	740	1480	2024	3/28	13	3829	3752	133	249	382	SB/WB	0.1	0.65	249	C	430	0.58
471	OC	Old Boggy Creek Rd	Denn John Ln	Fortune Rd	U	A1	Collector	480	770	830	830	2024	3/6	10	8899	8632	509	298	807	NB/EB	0.091	0.63	509	C	830	0.61
503	OC	Old Canoe Creek Rd	US 192-441	Neptune Rd	U	A1	Minor Art	1470	1790	1850	1850	2024	3/21	12	21135	20501	826	853	1679	SB/WB	0.079	0.51	853	B	1850	0.46
504	OC	Old Canoe Creek Rd	Neptune Rd	Kissimmee Park Rd	U	A2	Minor Art	0	1260	1670	1770	2024	3/20	12	28855	27989	1039	1215	2254	SB/WB	0.078	0.54	1215	C	1670	0.73
506	OC	Old Canoe Creek Rd	Kissimmee Park Rd	Canoe Creek Road (CR 523)	U	A1	Minor Art	480	770	830	830	2024	3/20	12	22627	21948	712	1138	1850	SB/WB	0.082	0.62	1138	F	830	1.37
357	OC	Old Dixie Hwy	Donegan Ave	Osceola Pkwy	U	A1	Collector	480	770	830	830	2024	3/6	10	9252	8974	394	463	857	SB/WB	0.093	0.54	463	B	830	0.56
529	OC	Old Hickory Tree Rd	Nolte Rd	US 192-441	U	A1	Collector	480	770	830	830	2024	3/21	12	7660	7430	283	477	760	SB/WB	0.099	0.63	477	B	830	0.57
103	OC	Old Lake Wilson Rd (CR 545)	ceola Polk Line Rd (CR 5	Sinclair Rd	U	A1	Minor Art	480	770	830	830	2024	4/2	14	24255	23770	612	986	1598	SB/WB	0.066	0.62	986	F	830	1.19
105	OC	Old Lake Wilson Rd (CR 545)	Sinclair Rd	Westgate Blvd	U	A1	Minor Art	1470	1790	1850	1850	2024	2/27	9	19236	18659	516	1081	1597	SB/WB	0.083	0.68	1081	B	1850	0.58
111	OC	Old Lake Wilson Rd (CR 545)	Westgate Blvd	US 192	U	A1	Minor Art	2270	2700	2780	2780	2024	4/2	14	34761	34066	954	1329	2283	SB/WB	0.066	0.58	1329	B	2780	0.48
601	OC	Old Melbourne Hwy	US 192	Bronco Dr	T	H	Collector	420	800	1120	1420	2024	3/20	12	4013	3893	177	148	325	NB/EB	0.081	0.54	177	B	800	0.22
208	OC	Old Tampa Hwy	US 17/92	Poinciana Blvd	U	H	Collector	400	800	1140	1440	2024	2/21	8	8569	8398	281	579	860	SB/WB	0.1	0.67	579	C	1140	0.51
233	OC	Old Tampa Hwy	Poinciana Blvd	Broad St	U	H	Collector	400	800	1140	1440	2024	3/28	13	14195	13911	666	519	1185	NB/EB	0.083	0.56	666	C	1140	0.58
207	OC	Old Tampa Hwy	Broad St	Jack Calhoun Dr	U	H	Collector	400	800	1140	1440	2024	2/21	8	10884	10666	288	654	942	SB/WB	0.087	0.69	654	C	1140	0.57
176	OC	Old Vineland Rd	US 192	Princess Way	U	A1	Collector	480	770	830	830	2024	3/7	10	5580	5413	251	248	499	NB/EB	0.089	0.5	251	B	830	0.3
324	OC	Orange Ave (CR 527)	Osceola Pkwy	Orange County Line	U	A1	Minor Art	1400	1700	1760	1760	2024	3/6	10	27759	26926	861	1190	2051	SB/WB	0.074	0.58	1190	B	1760	0.68
538	OC	Orange Ave (St Cloud)	US 192-441 (13th St)	Rummell Rd	U	A1	Collector	270	430	460	460	2024	3/21	12	2161	2096	106	93	199	NB/EB	0.092	0.53	106	B	460	0.23
178	OC	Oren Brown Rd	Poinciana Blvd	US 192	U	A1	Collector	480	770	830	830	2024	4/2	14	13735	13460	342	543	885	SB/WB	0.064	0.61	543	C	830	0.65
181	OC	Osceola Pkwy	I-4	SR 417	U	A2	Principal Art	0	1260	1670	1770	2024	2/27	9	25979	25200	1481	952	2433	NB/EB	0.094	0.61	1481	D	1670	0.89
180	OC	Osceola Pkwy	SR 417	Vineland Rd (SR 535)	U	A1	Principal Art	1470	1790	1850	1850	2024	2/27	9	26894	26087	1745	898	2643	NB/EB	0.098	0.66	1745	C	1850	0.94
183	OC	Osceola Pkwy	Vineland Rd (SR 535)	unrise City Dr/Storey Lake Bl	U	A1	Principal Art	1470	1790	1850	1850	2024	3/28	13	29785	29189	1765	931	2696	NB/EB	0.091	0.65	1765	C	1850	0.95
182	OC	Osceola Pkwy	Sunrise City Dr	Dyer Blvd	U	A1	Principal Art	1470	1790	1850	1850	2024	3/7	10	27934	27096	1385	1211	2596	NB/EB	0.093	0.53	1385	B	1850	0.75
325	OC	Osceola Pkwy	Dyer Blvd	John Young Pkwy	U	A2	Principal Art	0	1260	1670	1770	2024	3/7	10	37519	36393	1343	1715	3058	SB/WB	0.082	0.56	1715	E	1670	1.03
321	OC	Osceola Pkwy	John Young Pkwy	US 17-92-441 (O.B.T.)	U	A2	Principal Art	0	1260	1670	1770	2024	3/6	10	38202	37056	1335	1426	2761	SB/WB	0.072	0.52	1426	D	1670	0.85
323	OC	Osceola Pkwy	US 17-92-441 (O.B.T.)	Florida's Turnpike	U	A2	Principal Art	0	1970	2530	2670	2024	4/2	14	46837	45900	1711	1677	3388	NB/EB	0.072	0.51	1711	C	2530	0.68
448	OC	Osceola Pkwy	Florida's Turnpike	Buenaventura Blvd	U	A2	Principal Art	0	1970	2530	2670	2024	3/27	13	37995	37235	1786	964	2750	NB/EB	0.072	0.65	1786	C	2530	0.71
450	OC	Osceola Pkwy	Buenaventura Blvd	Simpson Rd	U	A1	Principal Art	1470	1790	1850	1850	2024	3/27	13	25462	24953	1153	641	1794	NB/EB	0.07	0.64	1153	B	1850	0.62
101	OC	Osceola Polk Line Rd (CR 532)	I-4	Old Lake Wilson Rd	U	A1	Minor Art	1470	1790	1850	1850	2024	4/2	14	33245	32580	1313	1141	2454	NB/EB	0.074	0.54	1313	B	1850	0.71
102	OC	Osceola Polk Line Rd (CR 532)	Old Lake Wilson Rd	US 17/92	U	A1	Minor Art	480	770	830	830	2024	3/28	13	20066	19665	665	666	1331	SB/WB	0.066	0.5	666	C	830	0.8
403	OC	Partin Settlement Rd	Neptune Rd	Cross Prairie Pkwy	U	A1	Collector	480	770	830	830	Under Construction														
9020	OC	Partin Settlement Rd	Cross Prairie Pkwy	US 192-441	U	A1	Collector	480	770	830	830	Under Construction														
418	OC	Partin Settlement Rd	US 192-441	Lakeshore Blvd	U	H	Collector	400	800	1140	1440	Under Construction														
543	OC	Pine Grove Rd	US 192-441	Nova Rd (CR 532)	U	H	Collector	400	800	1140	1440	2024	3/27	13	4385	4297	209	218	427	SB/WB	0.097	0.51	218	B	1140	0.19
507	OC	Pine Tree Rd	Canoe Creek Rd	Hickory Tree Rd	U	H	Collector	400	800	1140	1440	2024	3/20	12	6387	6195	286	286	572	NB/EB	0.09	0.5	286	B	1140	0.25
204	OC	Pleasant Hill Rd	Clay St	US 17/92	U	A2	Minor Art	0	1140	1510	1600	2018	4/5	14	18041	17680	611	628	1239	SB/WB	0.0687	0.51	628	C	1510	0.42
221	OC	Pleasant Hill Rd	Cypress Pkwy	Poinciana Blvd	U	A2	Minor Art	0	1970	2530	2670	2024	2/27	9	59025	57254	1504	2173	3677	SB/WB	0.062	0.59	2173	D	2530	0.86
212	OC	Pleasant Hill Rd	Poinciana Blvd	Grasmere View Pkwy	U	A1	Minor Art	1470	1790	1850	1850	2024	3/28	13	56454	55325	1848	2220	4068	SB/WB	0.072	0.55	2220	F	1850	1.2
205	OC	Pleasant Hill Rd	Grasmere View Pkwy	US 17/92	U	A1	Minor Art	1470	1790	1850	1850	2024	3/28	13	51909	50871	1503	1757	3260	SB/WB	0.063	0.54	1757	C	1850	0.95
213	OC	Poinciana Blvd	Pleasant Hill Rd	Crescent Lakes Way	U	H	Minor Art	400	800	1140	1440	2024	2/21	8	26446	25917	775	1017	1792	SB/WB	0.068	0.57	1017	D	1140	0.89
202	OC	Poinciana Blvd	Crescent Lakes Way	US 17/92	U	A1	Minor Art	1470	1790	1850	1850	2024	2/21	8	36943	36204	1189	1318	2507	SB/WB	0.068	0.53	1318	B	1850	0.71
201	OC	Poinciana Blvd	US 17/92	One Mile North of CSX RR	U	H	Principal Art	1770	2560	3320	3760	2024	3/6	10	44152	42827	1292	1681	2973	SB/WB	0.067	0.57	1681	B	3320	0.51

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161	OC	Poinciana Blvd	One Mile North of CSX R	Oren Brown Rd	U	H	Principal Art	1770	2560	3320	3760	2024	3/6	10	39730	38538	1180	1830	3010	SB/WB	0.076	0.61	1830	C	3320	0.55
160	OC	Poinciana Blvd	Oren Brown Rd	US 192 (Bronson Hwy)	U	A1	Principal Art	1470	1790	1850	1850	2024	2/27	9	36351	35260	1030	1406	2436	SB/WB	0.067	0.58	1406	B	1850	0.76
159	OC	Poinciana Blvd	US 192 (Bronson Hwy)	Vineland Rd (SR 535)	U	A1	Minor Art	1470	1790	1850	1850	2024	2/27	9	25731	24959	775	771	1546	NB/EB	0.06	0.5	775	B	1850	0.42
158	OC	Polynesian Isle Blvd	US 192	Vineland Rd (SR 535)	U	A1	Collector	1400	1700	1760	1760	2024	4/2	14	11603	11371	444	618	1062	SB/WB	0.092	0.58	618	B	1760	0.35
171	OC	Princess Way/Seven Dwarfs Ln	US 192 (Bronson Hwy)	Old Vineland Rd	U	A1	Collector	480	770	830	830	2024	3/7	10	4903	4756	178	207	385	SB/WB	0.079	0.54	207	B	830	0.25
211	OC	Reaves Rd	Poinciana Blvd	Pleasant Hill Rd	U	A1	Collector	370	590	630	630	2024	3/28	13	7540	7389	316	282	598	NB/EB	0.079	0.53	316	B	630	0.5
455	OC	Royal Palm Dr	Buenaventura Blvd	Simpson Rd	U	A1	Collector	370	590	630	630	2024	4/2	14	1768	1733	87	84	171	NB/EB	0.097	0.51	87	B	630	0.14
517	OC	Rummell Rd	Mississippi Ave	Narcoossee Rd (CR 15)	U	A1	Collector	480	770	830	830	2024	3/21	12	7769	7536	363	407	770	SB/WB	0.099	0.53	407	B	830	0.49
107	OC	Sand Hill Rd	Formosa Gardens Blvd	Old Lake Wilson Rd (CR 545)	U	A1	Collector	480	770	830	830	2024	4/2	14	3557	3486	97	271	368	SB/WB	0.103	0.74	271	B	830	0.33
404	OC	Shady Ln	Partin Settlement Rd	US 192-441 (Bronson Hwy)	U	A1	Collector	1470	1790	1850	1850	2024	3/26	13	17888	17530	731	793	1524	SB/WB	0.085	0.52	793	B	1850	0.43
113	OC	Sherberth Rd	US 192	Orange County Line	U	A1	Collector	460	740	790	790	2024	2/27	9	16741	16239	404	1004	1408	SB/WB	0.084	0.71	1004	F	790	1.27
173	OC	Siesta Lago Dr	Poinciana Blvd	US 192	U	A1	Collector	480	770	830	830	2024	2/27	9	7120	6906	243	286	529	SB/WB	0.074	0.54	286	B	830	0.34
412	OC	Simpson Rd	US 192-441	Fortune Rd	U	A1	Minor Art	480	770	830	830	Under Construction														
472	OC	Simpson Rd	Fortune Rd	Buenaventura Blvd	U	A1	Minor Art	1470	1790	1850	1850	Under Construction														
473	OC	Simpson Rd	Buenaventura Blvd	Osceola Pkwy	U	A1	Minor Art	500	810	870	870	Under Construction														
479	OC	Simpson Rd	Osceola Pkwy	Boggy Creek Rd (East)	U	A1	Principal Art	500	810	870	870	Under Construction														
106	OC	Sinclair Rd	R 429 (Western Beltway	Old Lake Wilson Rd	U	A2	Collector	0	1260	1670	1770	2024	4/2	14	16015	15695	861	739	1600	NB/EB	0.1	0.54	861	C	1670	0.52
214	OC	Southport Rd	Pleasant Hill Rd	Southport Rd	T	H	Minor Coll	420	800	1120	1420	2024	2/27	9	1065	1033	52	63	115	SB/WB	0.108	0.55	63	B	800	0.08
972610	FDOT	SR 417	I-4	Celebration Ave	U	F	Freeway	2200	3020	3720	4020	2023	N/A	N/A	N/A	30900	N/A		N/A	N/A	N/A	N/A	N/A	N/A	3720	NA
972620	FDOT	SR 417	Celebration Ave	Osceola Pkwy	U	F	Freeway	2200	3020	3720	4020	2023	N/A	N/A	N/A	40600	N/A		N/A	N/A	N/A	N/A	N/A	N/A	3720	NA
972630	FDOT	SR 417	Osceola Pkwy	Orange County Line	U	F	Freeway	2200	3020	3720	4020	2023	N/A	N/A	N/A	50800	N/A		N/A	N/A	N/A	N/A	N/A	N/A	3720	NA
972800	FDOT	SR 429 (Western Beltway)	I-4	Sinclair Rd	U	F	Freeway	2200	3020	3720	4020	2023	N/A	N/A	N/A	31400	N/A		N/A	N/A	N/A	N/A	N/A	N/A	3720	NA
972810	FDOT	SR 429 (Western Beltway)	Sinclair Rd	US 192/Orange County Line	U	F	Freeway	2200	3020	3720	4020	2023	N/A	N/A	N/A	31600	N/A		N/A	N/A	N/A	N/A	N/A	N/A	3720	NA
920318	FDOT	SR 535 (Vineland Rd)	US 192	Poinciana Blvd	U	A2	Minor Art	0	1400	1860	1960	2023	N/A	N/A	N/A	32500	N/A		N/A	N/A	N/A	N/A	N/A	N/A	1860	NA
923	OC	SR 535 (Vineland Rd)	Poinciana Blvd	Orange County Line	U	A2	Minor Art	0	1400	1860	1960	2024	4/2	14	52842	51785	1659	1597	3256	NB/EB	0.062	0.51	1659	D	1860	0.89
920058	FDOT	SR 60	Indian River County Line	Polk County Line	RU	H	Principal Art	240	430	740	1480	2023	N/A	N/A	N/A	10000	N/A		N/A	N/A	N/A	N/A	N/A	N/A	430	NA
9017	OC	Storey Creek Blvd	Ham Brown Rd	Cricket Cradle Dr	U	A1	Collector	540	860	920	920	2024	2/21	8	2118	2076	67	82	149	SB/WB	0.07	0.55	82	B	920	0.09
9018	OC	Storey Creek Blvd	Cricket Cradle Dr	Pleasant Hill Rd	U	A1	Collector	560	900	970	970	2024	2/21	8	1137	1114	58	65	123	SB/WB	0.108	0.53	65	B	970	0.07
512	OC	Tenth (10th) St	US 192-441 (13th St)	Michigan Ave	U	A1	Collector	280	450	490	490	2024	3/21	12	5625	5456	320	249	569	NB/EB	0.101	0.56	320	C	490	0.65
515	OC	Tenth (10th) St	Michigan Ave	Narcoossee Rd (CR 15)	U	A1	Collector	350	560	600	600	2024	3/21	12	6272	6084	346	249	595	NB/EB	0.095	0.58	346	B	600	0.58
305	OC	Thacker Ave	Clay St	MLK Jr Blvd	U	A2	Collector	0	530	770	810	2024	2/21	8	9366	9179	227	503	730	SB/WB	0.078	0.69	503	C	770	0.65
307	OC	Thacker Ave	Osceola Pkwy	John Young Pkwy	U	A1	Collector	1470	1790	1850	1850	2024	3/7	10	10909	10582	381	610	991	SB/WB	0.091	0.62	610	B	1850	0.33
911	OC	US 17/92	Pleasant Hill Rd	Portage St	U	A1	Principal Art	1640	1980	2060	2060	2024	4/2	14	63678	62404	2606	2348	4954	NB/EB	0.078	0.53	2606	F	2060	1.27
920003	FDOT	US 17/92	Portage St	Emmett St	U	A1	Principal Art	2520	3000	3090	3090	2023	N/A	N/A	N/A	60500	N/A		N/A	N/A	N/A	N/A	N/A	N/A	3090	NA
319	OC	US 17/92	Emmett St	US 192-441	U	A1	Principal Art	2400	2860	2940	2940	2024	2/21	8	45562	44651	1444	1416	2860	NB/EB	0.063	0.5	1444	B	2940	0.49
920314	FDOT	US 17/92 (S Orange Blossom Tr)	Polk County Line	Osceola Polk Line Rd (CR 532	U	A1	Principal Art	510	820	880	880	2023	N/A	N/A	N/A	22000	N/A		N/A	N/A	N/A	N/A	N/A	N/A	880	NA
910	OC	US 17/92 (S Orange Blossom Tr)	ceola Polk Line Rd (CR 5	Old Tampa Hwy	U	A1	Principal Art	540	860	920	920	2024	4/2	14	35387	34679	1083	1285	2368	SB/WB	0.067	0.54	1285	F	920	1.4
914	OC	US 17/92 (S Orange Blossom Tr)	Old Tampa Hwy	Poinciana Blvd	U	A1	Principal Art	540	860	920	920	2024	4/2	14	28536	27965	817	1111	1928	SB/WB	0.068	0.58	1111	F	920	1.21
922	OC	US 17/92 (S Orange Blossom Tr)	Poinciana Blvd	Ham Brown Rd	U	A1	Principal Art	1560	1890	1960	1960	2024	2/21	8	29397	28809	1062	971	2033	NB/EB	0.069	0.52	1062	B	1960	0.54
921	OC	US 17/92 (S Orange Blossom Tr)	Ham Brown Rd	Pleasant Hill Rd	U	A1	Principal Art	1640	1980	2060	2060	2024	4/10	15	28005	27725	1075	1133	2208	SB/WB	0.079	0.51	1133	B	2060	0.55
750020	FDOT	US 192	Lake County Line	SR 429 (Western Beltway)	U	A2	Principal Art	0	2180	2810	2970	2023	N/A	N/A	N/A	55500	N/A		N/A	N/A	N/A	N/A	N/A	N/A	2810	NA
901	OC	US 192	SR 429	World Dr	U	A2	Principal Art	0	2180	2810	2970	2024	2/27	9	76518	74222	2049	3054	5103	SB/WB	0.067	0.6	3054	F	2810	1.09
920311	FDOT	US 192	World Dr	I-4	U	F	Principal Art	3300	4580	5580	6200	2023	N/A	N/A	N/A	79000	N/A		N/A	N/A	N/A	N/A	N/A	N/A	5580	NA
920300	FDOT	US 192	I-4	Parkway Blvd/Celebration Pl	U	A2	Principal Art	0	2180	2810	2970	2023	N/A	N/A	N/A	56500	N/A		N/A	N/A	N/A	N/A	N/A	N/A	2810	NA
902	OC	US 192	rkway Blvd/Celebration	Polynesian Isle Blvd	U	A2	Principal Art	0	2180	2810	2970	2024	2/27	9	50294	48785	2005	1578	3583	NB/EB	0.071	0.56	2005	C	2810	0.71
920320	FDOT	US 192	Polynesian Isle Blvd	Vineland Rd (SR 535)	U	A1	Principal Art	2520	3000	3090	3090	2023	N/A	N/A	N/A	39500	N/A		N/A	N/A	N/A	N/A	N/A	N/A	3090	NA
904	OC	US 192	Vineland Rd (SR 535)	Siesta Lago Dr	U	A1	Principal Art	2520	3000	3090	3090	2024	3/7	10	58251	56503	1731	1931	3662	SB/WB	0.063	0.53	1931	B	3090	0.62
913	OC	US 192	Siesta Lago Dr	Hoagland Blvd	U	A1	Principal Art	2520	3000	3090	3090	2024	3/7	10	65260	63302	1939	2120	4059	SB/WB	0.062	0.52	2120	B	3090	0.69
905	OC	US 192	Hoagland Blvd	Thacker Ave	U	A2	Principal Art	0	2180	2810	2970	2024	4/2	14	44701	43807	1376	1615	2991	SB/WB	0.067	0.54	1615	C	2810	0.57
925016	FDOT	US 192	Thacker Ave	Main St/US 441-17/92	U	A2	Principal Art	0	2080	2680	2830	2023	N/A	N/A	N/A	52500	N/A		N/A	N/A	N/A	N/A	N/A	N/A	2680	NA
921008	FDOT	US 192	S 441/SR 15/Holopaw R	Brevard County Line	RU	H	Principal Art	1410	2210	2800	3180	2023	N/A	N/A	N/A	9300	N/A		N/A	N/A	N/A	N/A	N/A	N/A	2210	NA
925017	FDOT	US 192-441	Main St/US 441-17/92	Michigan Ave/Oak St	U	A1	Principal Art	2520	3000	3090	3090	2023	N/A	N/A	N/A	49500	N/A		N/A	N/A	N/A	N/A	N/A	N/A	3090	NA
906	OC	US 192-441	Michigan Ave/Oak St	Fortune Rd	U	A2	Principal Art	0	2180	2810	2970	2024	3/6	10	59093	57320	2412	1795	4207	NB/EB	0.071	0.57	2412	D	2810	0.86
907	OC	US 192-441	Fortune Rd	Shady Ln/Fla Turnpike	U	A1	Principal Art	2520	3000	3090	3090	2024	3/26	13	53030	51969	1844	2010	3854	SB/WB	0.073	0.52	2010	B	3090	0.65
908	OC	US 192-441	Shady Ln/Fla Turnpike	Partin Settlement Rd	U	A2	Principal Art	0	2180	2810	2970	2024	4/3	14	65976	64656	2004	2839	4843	SB/WB	0.073	0.59	2839	E	2810	1.01
925	OC	US 192-441	Partin Settlement Rd	Commerce Center Dr	U	A1	Principal Art	2520	3000	3090	3090	2024	4/3	14	59281	58095	2391	1666	4057	NB/EB	0.068	0.59	2391	B	3090	0.77
920105	FDOT	US 192-441	Commerce Center Dr	Columbia Ave/Budinger Ave	U	A2	Principal Art	0	2080	2680	2830	2023	N/A	N/A	N/A	42000	N/A		N/A	N/A	N/A	N/A	N/A	N/A	2680	NA

2024 Roadway Network Capacity Report

(Updated 05/14/2023)

925021	FDOT	US 192-441	olumbia Ave/Budinger A	Mississippi Ave	U	A2	Principal Art	0	2080	2680	2830	2023	N/A	N/A	N/A	41000	N/A		N/A	N/A	N/A	N/A	N/A	N/A	2680	NA
927	OC	US 192-441	Mississippi Ave	larcoossee Rd (CR 15)/Hickor	U	A2	Principal Art	0	2180	2810	2970	2024	3/21	12	47238	45821	1689	1568	3257	NB/EB	0.069	0.52	1689	C	2810	0.6
920255	FDOT	US 192-441	coossee Rd (CR 15)/Hick	Nova Rd (CR 532)	U	H	Principal Art	2660	3840	4980	5650	2023	N/A	N/A	N/A	41500	N/A		N/A	N/A	N/A	N/A	N/A	N/A	4980	NA
909	OC	US 192-441	Nova Rd (CR 532)	Old Melbourne Hwy	U	H	Principal Art	1770	2560	3320	3760	2024	3/20	12	33117	32123	1245	1225	2470	NB/EB	0.075	0.5	1245	B	3320	0.38
920304	FDOT	US 192-441	Old Melbourne Hwy	US 441/SR 15/Holopaw Rd	T	H	Principal Art	1670	2420	3130	3550	2023	N/A	N/A	N/A	20500	N/A		N/A	N/A	N/A	N/A	N/A	N/A	2420	NA
920044	FDOT	US 441/SR 15/Kenansville Rd	SR 60	Canoe Creek Rd/CR 523	RU	H	Principal Art	240	430	740	1480	2023	N/A	N/A	N/A	1600	N/A		N/A	N/A	N/A	N/A	N/A	N/A	430	NA
921006	FDOT	US 441/SR 15/Kenansville Rd/Ho	Canoe Creek Rd/CR 523	US 192	RU	H	Principal Art	240	430	740	1480	2023	N/A	N/A	N/A	3300	N/A		N/A	N/A	N/A	N/A	N/A	N/A	430	NA
920100	FDOT	US 441-17/92 (N Orange Blossom	Donegan Ave	Carroll St	U	A1	Principal Art	1640	1980	2060	2060	2023	N/A	N/A	N/A	40000	N/A		N/A	N/A	N/A	N/A	N/A	N/A	2060	NA
912	OC	US 441-17/92 (N Orange Blossom	Carroll St	Osceola Pkwy	U	A1	Principal Art	1640	1980	2060	2060	2024	3/6	10	43826	42511	1407	1900	3307	SB/WB	0.075	0.57	1900	C	2060	0.92
916	OC	US 441-17/92 (N Orange Blossom	Osceola Pkwy	Orange County Line	U	A1	Principal Art	2520	3000	3090	3090	2024	3/6	10	40178	38973	1368	1924	3292	SB/WB	0.082	0.58	1924	B	3090	0.62
1004	OC	Vermont Ave	Lakeshore Blvd	US 192	U	A1	Local	370	590	630	630	2024	3/21	12	2145	2081	79	132	211	SB/WB	0.098	0.63	132	B	630	0.21
NA7	OC	Westside Blvd	Armadillo Ave	Goodman Road	U	A1	Collector	1470	1790	1850	1850	2024	4/2	14	7139	6996	213	254	467	SB/WB	0.065	0.54	254	B	1850	0.14
NA6	OC	Westside Blvd	Florence Villa Grove Rd	Funie Steed Rd	U	A1	Collector	1470	1790	1850	1850	2024	2/27	9	21619	20970	763	914	1677	SB/WB	0.078	0.55	914	B	1850	0.49
NA5	OC	Westside Blvd	Funie Steed Rd	US 192	U	A1	Collector	1470	1790	1850	1850	2024	4/2	14	15376	15068	505	742	1247	SB/WB	0.081	0.6	742	B	1850	0.4
2026	OC	Westside Blvd	Polk County Line	asis Club Blvd./Olympic Club	U	A1	Local	460	740	790	790	2024	4/10	15	7451	7376	274	405	679	SB/WB	0.091	0.6	405	B	790	0.51
9003	OC	Westside Blvd	Oasis Club Blvd	Bella Citta Blvd	U	A1	Local	500	810	870	870	2024	4/2	14	7008	6868	307	455	762	SB/WB	0.109	0.6	455	B	870	0.52
9004	OC	Westside Blvd	Bella Citta Blvd	TWA Property	U	A1	Local	1400	1700	1760	1760	2024	2/27	9	6545	6349	273	257	530	NB/EB	0.081	0.52	273	B	1760	0.16
310	OC	Woodcrest Blvd	Michigan Ave	Bill Beck Blvd	U	A1	Collector	460	740	790	790	2009	4/22	17	7470	7395	372	228	600	NB/EB	0.08	0.62	372	B	790	0.47
124	OC	World Dr	I-4	US 192	U	A1	Minor Art	1400	1700	1760	1760	2024	3/21	12	16328	15838	688	901	1589	SB/WB	0.097	0.57	901	B	1760	0.51
114	OC	World Dr	US 192	Osceola Pkwy	U	F	Minor Art	3300	4580	5580	6200	2024	3/21	12	29108	28235	907	1243	2150	SB/WB	0.074	0.58	1243	B	5580	0.22
1005	OC	Zuni Rd	Jack Brack Rd	Cyrils Dr	U	A1	Collector	460	740	790	790	Under Construction														

Under Construction

FDOT Stations - 2023 AADT obtained from 2023 FTO

Appendix F
Historical Traffic Counts & Growth Rate Calculations

Osceola Traffic Counts Detailed View
Station 540

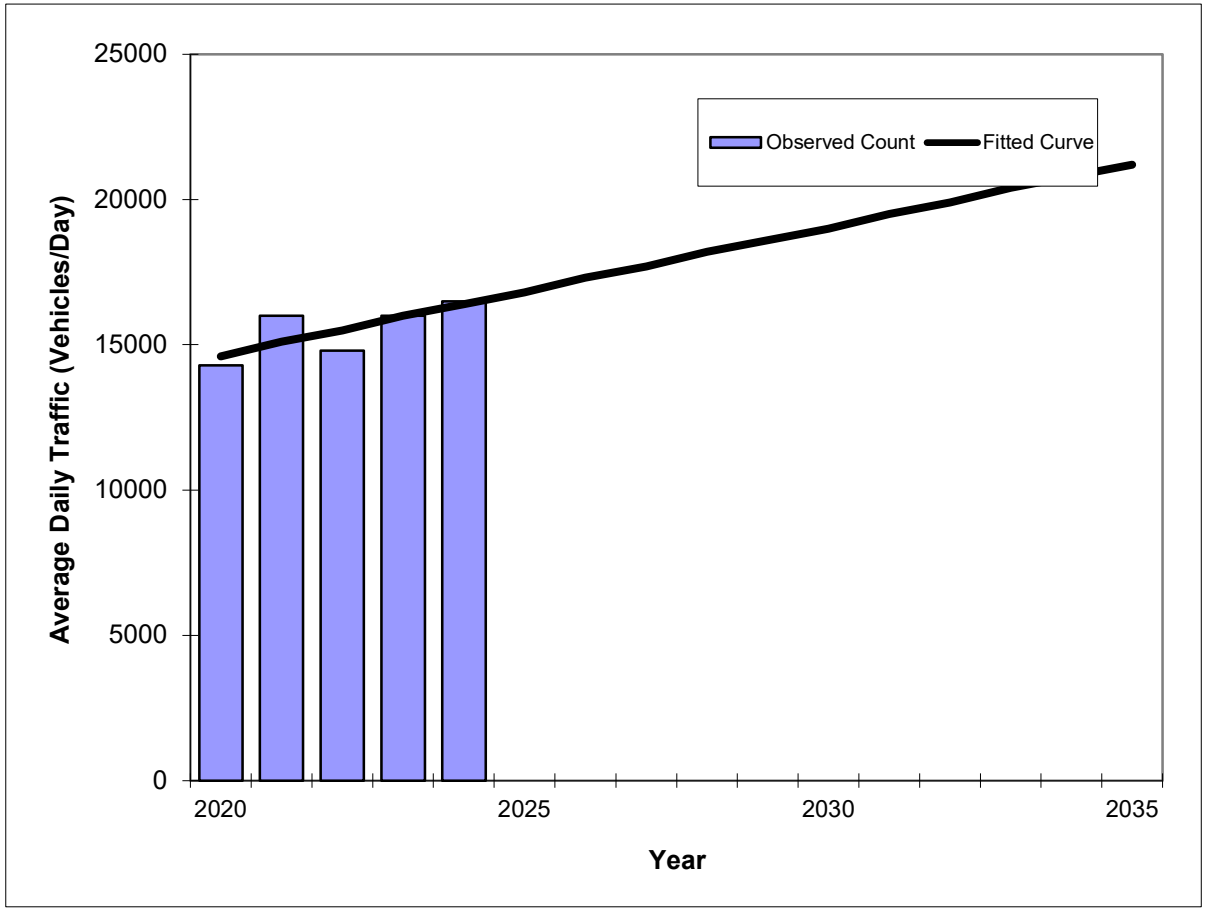
Station_ID	540
Street_Name	HICKORY TREE RD
From_	US 192 (West)
To_	Nolte Rd
Roadway_Classification	Minor Art
DailyTrafficCount2008	5,005
DailyTrafficCount2009	4,742
DailyTrafficCount2010	4,699
DailyTrafficCount2012	4,985
DailyTrafficCount2015	6,785
DailyTrafficCount2016	7,470
DailyTrafficCount2017	8,784
DailyTrafficCount2018	9,559
DailyTrafficCount2019	11,168
DailyTrafficCount2020	14,283
DailyTrafficCount2021	15,962
DailyTrafficCount2022	14,831
DailyTrafficCount2023	15,969
DailyTrafficCount2024	16,536
LOS	D
VC	1
GlobalID_2	dfe8df04-6bae-4e25-8316-f42af02f0dce

Traffic Trends - V03.a

HICKORY TREE RD -- US 192 to Nolte Rd

FIN#	1234
Location	1

County:	Osceola (92)
Station #:	540
Highway:	HICKORY TREE RD



Year	Traffic (ADT/AADT) Count*	Trend**
2020	14300	14600
2021	16000	15100
2022	14800	15500
2023	16000	16000
2024	16500	16400
2024 Opening Year Trend		
2024	N/A	16400
2026 Mid-Year Trend		
2026	N/A	17300
2028 Design Year Trend		
2028	N/A	18200
TRANPLAN Forecasts/Trends		

**** Annual Trend Increase:**	440
Trend R-squared:	56.48%
Trend Annual Historic Growth Rate:	3.08%
Trend Growth Rate (2024 to Design Year):	2.74%
Printed:	20-Nov-24

Straight Line Growth Option

***Axle-Adjusted**

Osceola Traffic Counts Detailed View
Station 539

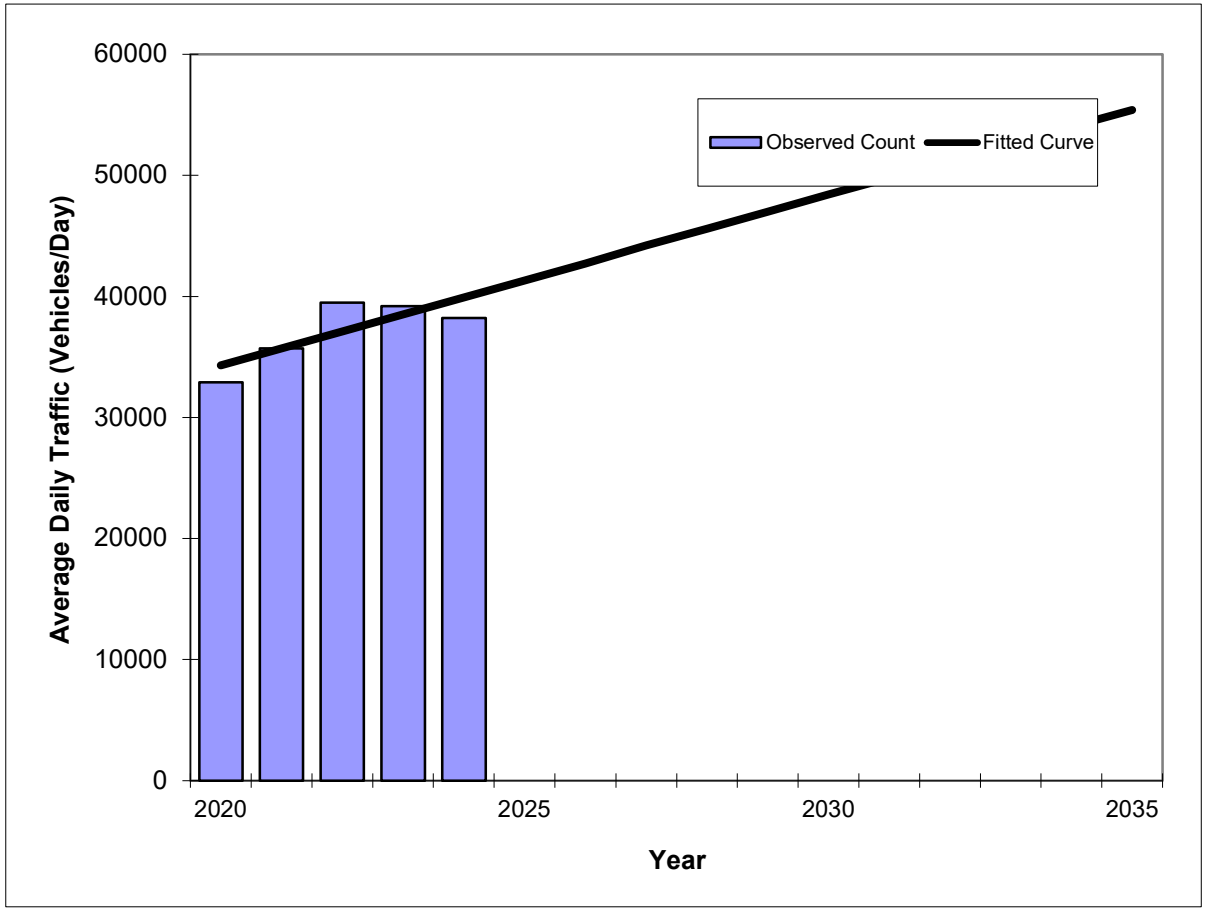
Station_ID	539
Street_Name	NARCOOSSEE RD (CR 15)
From_	Jones Rd
To_	Rummel Rd
Roadway_Classification	Principal Art
DailyTrafficCount2008	19,560
DailyTrafficCount2009	0
DailyTrafficCount2010	0
DailyTrafficCount2012	0
DailyTrafficCount2015	0
DailyTrafficCount2016	0
DailyTrafficCount2017	27,011
DailyTrafficCount2018	26,942
DailyTrafficCount2019	30,828
DailyTrafficCount2020	32,852
DailyTrafficCount2021	35,680
DailyTrafficCount2022	39,511
DailyTrafficCount2023	39,175
DailyTrafficCount2024	38,174
LOS	C
VC	0.54
GlobalID_2	97123fa1-33d0-4f87-9282-40de4e3a44a2

Traffic Trends - V03.a

NARCOOSSEE Rd -- Jones Rd to Rummel Rd

FIN#	1234
Location	1

County:	Osceola (92)
Station #:	539
Highway:	NARCOOSSEE Rd



Year	Traffic (ADT/AADT) Count*	Trend**
2020	32900	34300
2021	35700	35700
2022	39500	37100
2023	39200	38500
2024	38200	39900
2024 Opening Year Trend		
2024	N/A	39900
2026 Mid-Year Trend		
2026	N/A	42700
2028 Design Year Trend		
2028	N/A	45600
TRANPLAN Forecasts/Trends		

**** Annual Trend Increase:**	1,410
Trend R-squared:	64.17%
Trend Annual Historic Growth Rate:	4.08%
Trend Growth Rate (2024 to Design Year):	3.57%
Printed:	20-Nov-24

Straight Line Growth Option

***Axle-Adjusted**

Osceola Traffic Counts Detailed View
Station 541

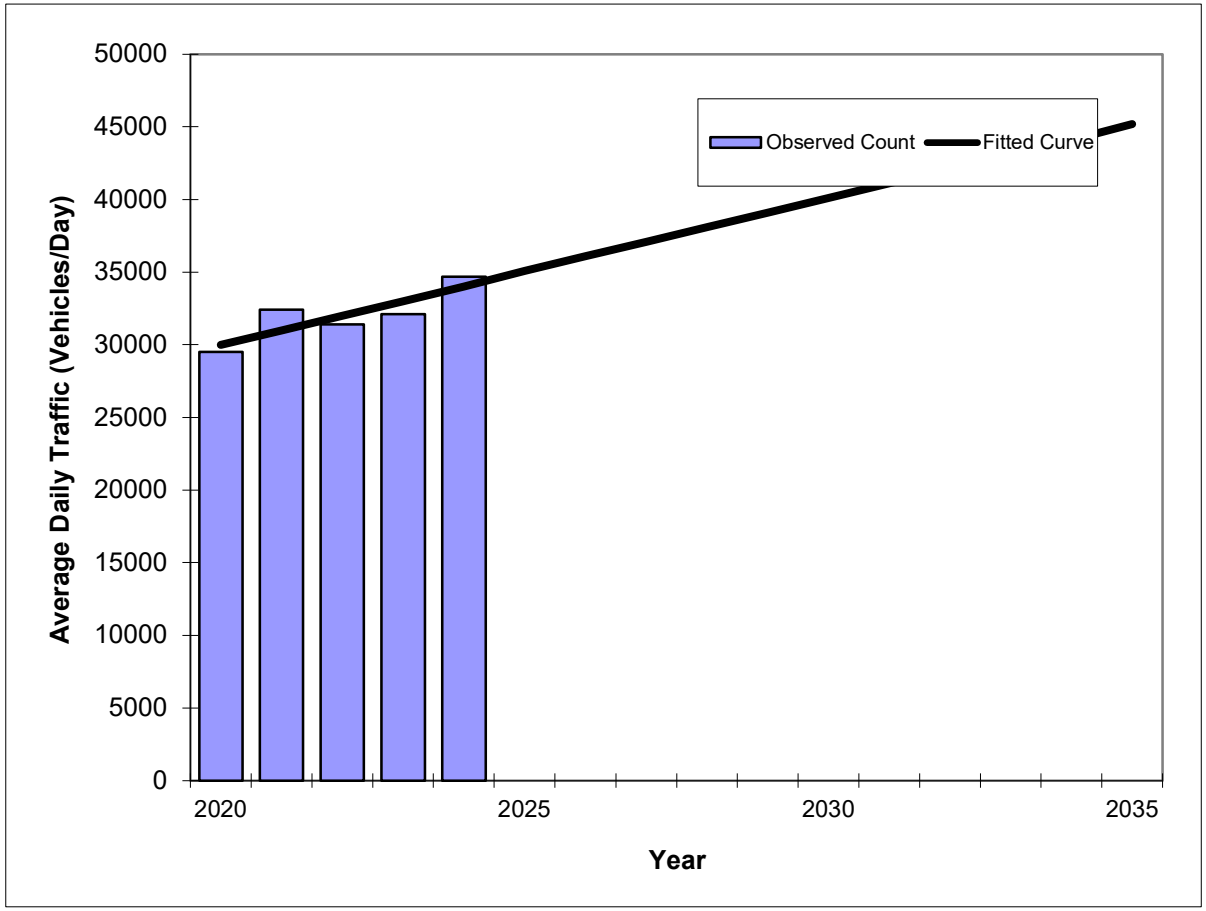
Station_ID	541
Street_Name	NARCOOSSEE RD (CR 15)
From_	Rummel Rd
To_	10th St
Roadway_Classification	Principal Art
DailyTrafficCount2008	16,356
DailyTrafficCount2009	0
DailyTrafficCount2010	0
DailyTrafficCount2012	0
DailyTrafficCount2015	0
DailyTrafficCount2016	0
DailyTrafficCount2017	25,984
DailyTrafficCount2018	24,539
DailyTrafficCount2019	27,410
DailyTrafficCount2020	29,542
DailyTrafficCount2021	32,418
DailyTrafficCount2022	31,404
DailyTrafficCount2023	32,083
DailyTrafficCount2024	34,694
LOS	C
VC	0.82
GlobalID_2	d45230e5-f24b-4187-b3b1-94e0ebe1228b

Traffic Trends - V03.a

NARCOOSSEE Rd -- Rummel Rd to 10th St

FIN#	1234
Location	1

County:	Osceola (92)
Station #:	541
Highway:	NARCOOSSEE Rd



Year	Traffic (ADT/AADT) Count*	Trend**
2020	29500	30000
2021	32400	31000
2022	31400	32000
2023	32100	33000
2024	34700	34000
2024 Opening Year Trend		
2024	N/A	34000
2026 Mid-Year Trend		
2026	N/A	36100
2028 Design Year Trend		
2028	N/A	38100
TRANPLAN Forecasts/Trends		

**** Annual Trend Increase:**	1,010
Trend R-squared:	72.51%
Trend Annual Historic Growth Rate:	3.33%
Trend Growth Rate (2024 to Design Year):	3.01%
Printed:	20-Nov-24

Straight Line Growth Option

***Axle-Adjusted**

Osceola Traffic Counts Detailed View
Station 589

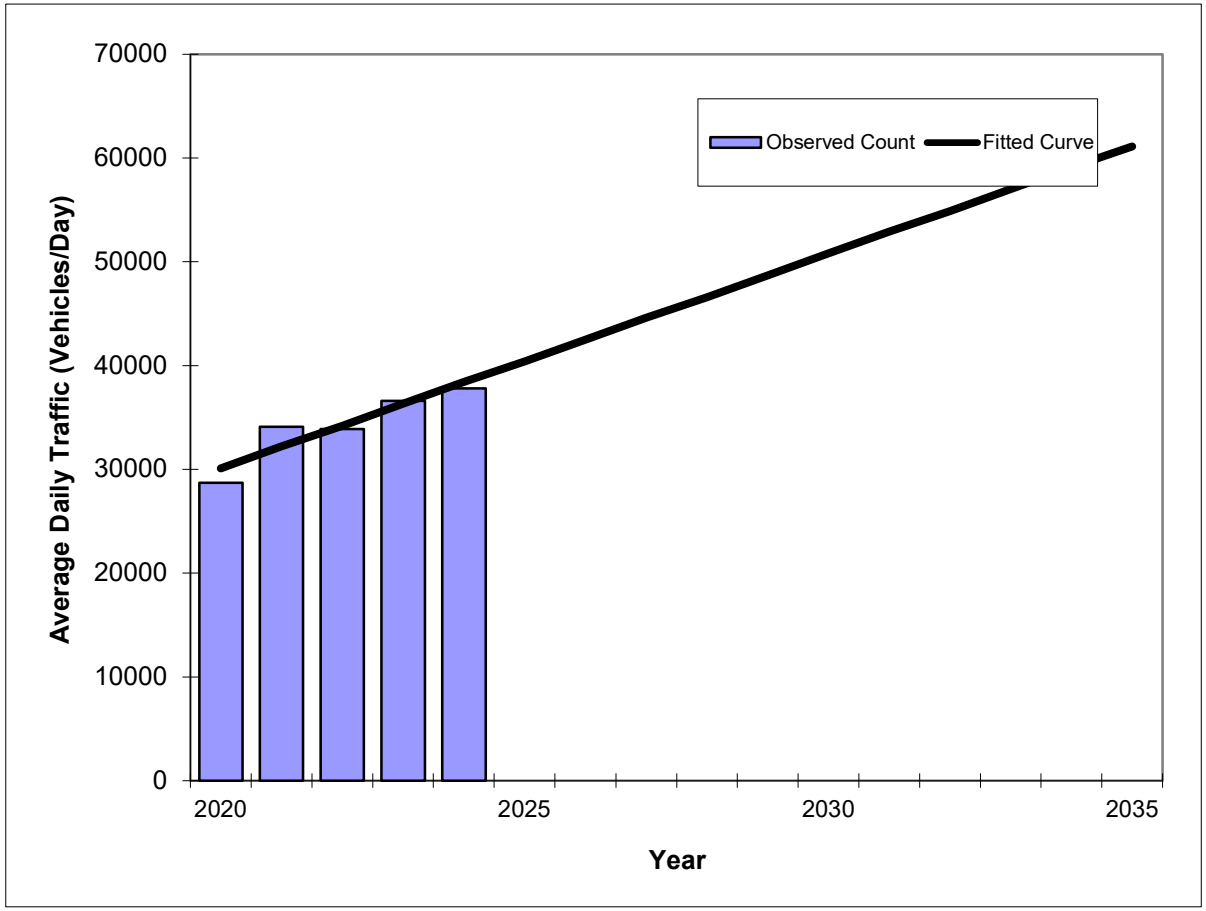
Station_ID	589
Street_Name	NARCOOSSEE RD (CR 15)
From_	10th St
To_	U.S. 192-441
Roadway_Classification	Principal Art
DailyTrafficCount2008	0
DailyTrafficCount2009	0
DailyTrafficCount2010	0
DailyTrafficCount2012	0
DailyTrafficCount2015	0
DailyTrafficCount2016	0
DailyTrafficCount2017	26,375
DailyTrafficCount2018	25,284
DailyTrafficCount2019	27,693
DailyTrafficCount2020	28,731
DailyTrafficCount2021	34,086
DailyTrafficCount2022	33,914
DailyTrafficCount2023	36,581
DailyTrafficCount2024	37,804
LOS	C
VC	0.93
GlobalID_2	b22157b4-4ba2-488b-9143-472a94a4fc60

Traffic Trends - V03.a

NARCOOSSEE Rd -- 10th St to US 192-441

FIN#	1234
Location	1

County:	Osceola (92)
Station #:	589
Highway:	NARCOOSSEE Rd



Year	Traffic (ADT/AADT) Count*	Trend**
2020	28700	30100
2021	34100	32200
2022	33900	34200
2023	36600	36300
2024	37800	38400
2024 Opening Year Trend		
2024	N/A	38400
2026 Mid-Year Trend		
2026	N/A	42500
2028 Design Year Trend		
2028	N/A	46600
TRANPLAN Forecasts/Trends		

**** Annual Trend Increase:**	2,070
Trend R-squared:	87.33%
Trend Annual Historic Growth Rate:	6.89%
Trend Growth Rate (2024 to Design Year):	5.34%
Printed:	20-Nov-24

Straight Line Growth Option

***Axle-Adjusted**

Osceola Traffic Counts Detailed View
Station 9,011

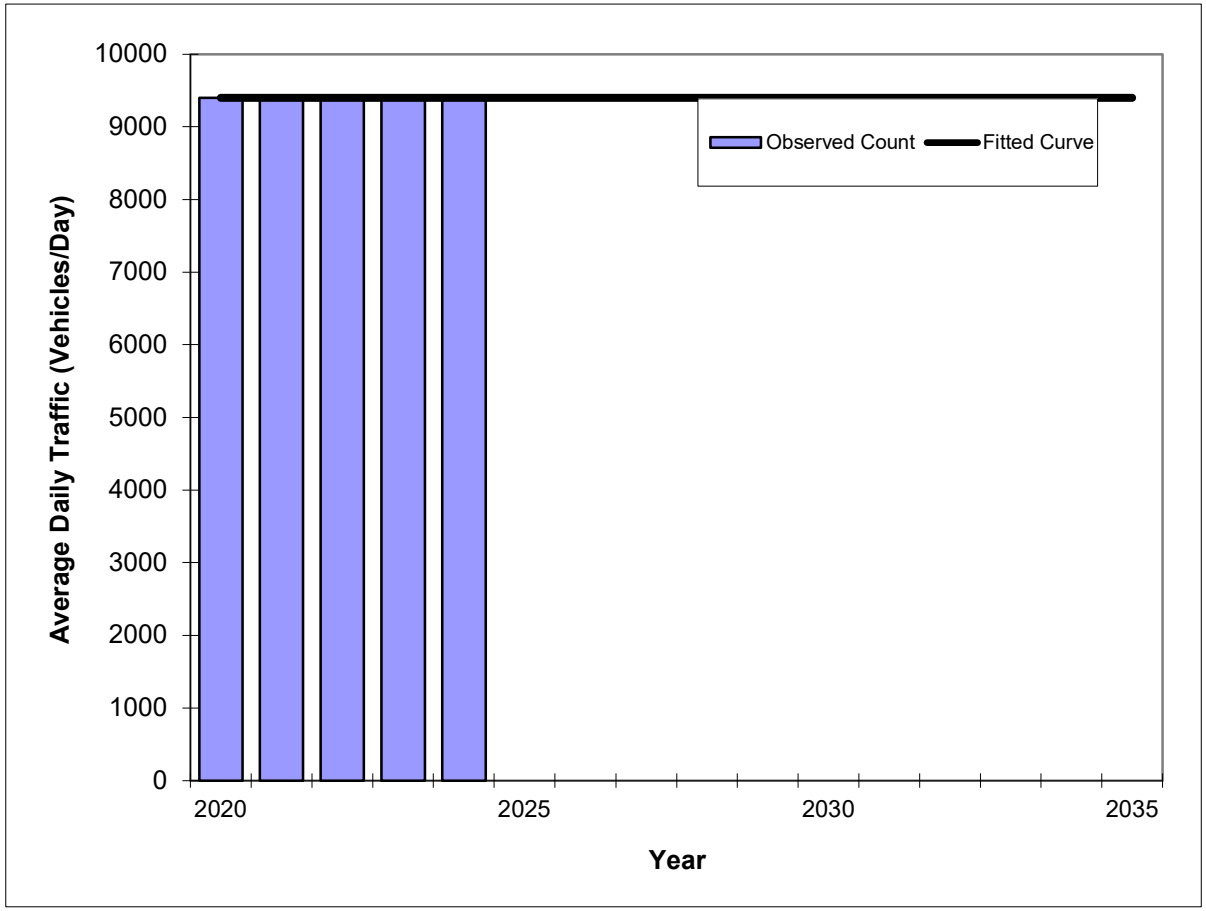
Station_ID	9,011
Street_Name	Nova Rd (CR 532)
From_	US 192
To_	Lake Lizzie Drive
Roadway_Classification	Collector
DailyTrafficCount2008	0
DailyTrafficCount2009	0
DailyTrafficCount2010	0
DailyTrafficCount2012	0
DailyTrafficCount2015	0
DailyTrafficCount2016	0
DailyTrafficCount2017	0
DailyTrafficCount2018	0
DailyTrafficCount2019	0
DailyTrafficCount2020	0
DailyTrafficCount2021	0
DailyTrafficCount2022	0
DailyTrafficCount2023	9,425
DailyTrafficCount2024	9,439
LOS	C
VC	0.37
GlobalID_2	d82f7c72-15e4-4dc0-a543-f9c0b4e2c071

Traffic Trends - V03.a

NOVA RD -- US 192 to Lake Lizzie Drive

FIN#	1234
Location	1

County:	Osceola (92)
Station #:	9011
Highway:	NOVA RD



Year	Traffic (ADT/AADT) Count*	Trend**
2020	9400	9400
2021	9400	9400
2022	9400	9400
2023	9400	9400
2024	9400	9400
2024 Opening Year Trend		
2024	N/A	9400
2026 Mid-Year Trend		
2026	N/A	9400
2028 Design Year Trend		
2028	N/A	9400
TRANPLAN Forecasts/Trends		

**** Annual Trend Increase:**	0
Trend R-squared:	#DIV/0!
Trend Annual Historic Growth Rate:	0.00%
Trend Growth Rate (2024 to Design Year):	0.00%
Printed:	20-Nov-24
Straight Line Growth Option	

***Axle-Adjusted**

Osceola Traffic Counts Detailed View
Station 542

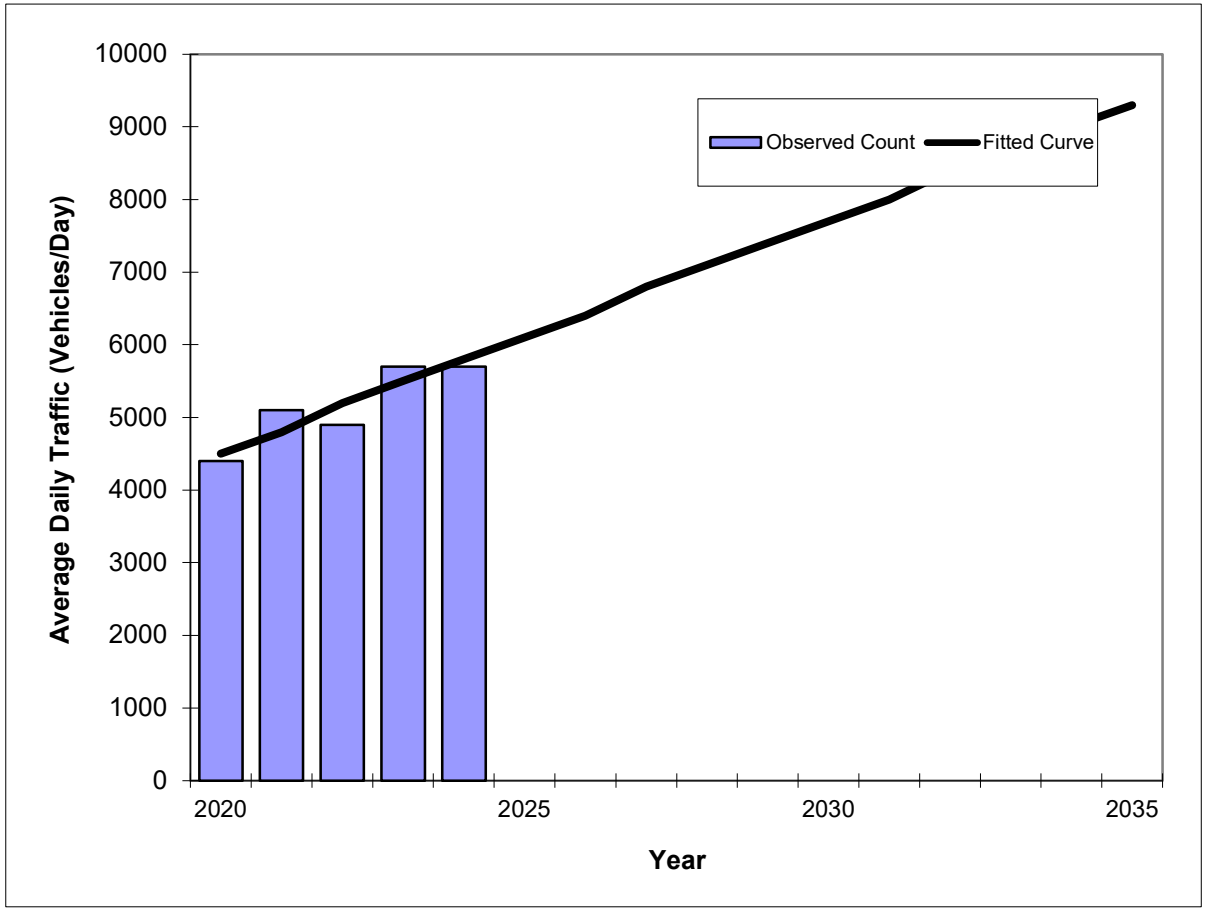
Station_ID	542
Street_Name	NOVA RD
From_	U.S. 192-441
To_	Eden Dr
Roadway_Classification	Collector
DailyTrafficCount2008	0
DailyTrafficCount2009	5,188
DailyTrafficCount2010	0
DailyTrafficCount2012	5,061
DailyTrafficCount2015	3,271
DailyTrafficCount2016	3,530
DailyTrafficCount2017	3,615
DailyTrafficCount2018	3,811
DailyTrafficCount2019	3,919
DailyTrafficCount2020	4,352
DailyTrafficCount2021	5,090
DailyTrafficCount2022	4,890
DailyTrafficCount2023	5,708
DailyTrafficCount2024	5,670
LOS	B
VC	0.26
GlobalID_2	2c16db26-b6ac-431d-9104-0b8b0cfc7fb4

Traffic Trends - V03.a

NOVA RD -- Lake Lizzie to Eden Dr

FIN#	1234
Location	1

County:	Osceola (92)
Station #:	542
Highway:	NOVA RD



Year	Traffic (ADT/AADT) Count*	Trend**
2020	4400	4500
2021	5100	4800
2022	4900	5200
2023	5700	5500
2024	5700	5800
2024 Opening Year Trend		
2024	N/A	5800
2026 Mid-Year Trend		
2026	N/A	6400
2028 Design Year Trend		
2028	N/A	7100
TRANPLAN Forecasts/Trends		

**** Annual Trend Increase:**	320
Trend R-squared:	83.12%
Trend Annual Historic Growth Rate:	7.22%
Trend Growth Rate (2024 to Design Year):	5.60%
Printed:	20-Nov-24

Straight Line Growth Option

***Axle-Adjusted**

Osceola Traffic Counts Detailed View
Station 538

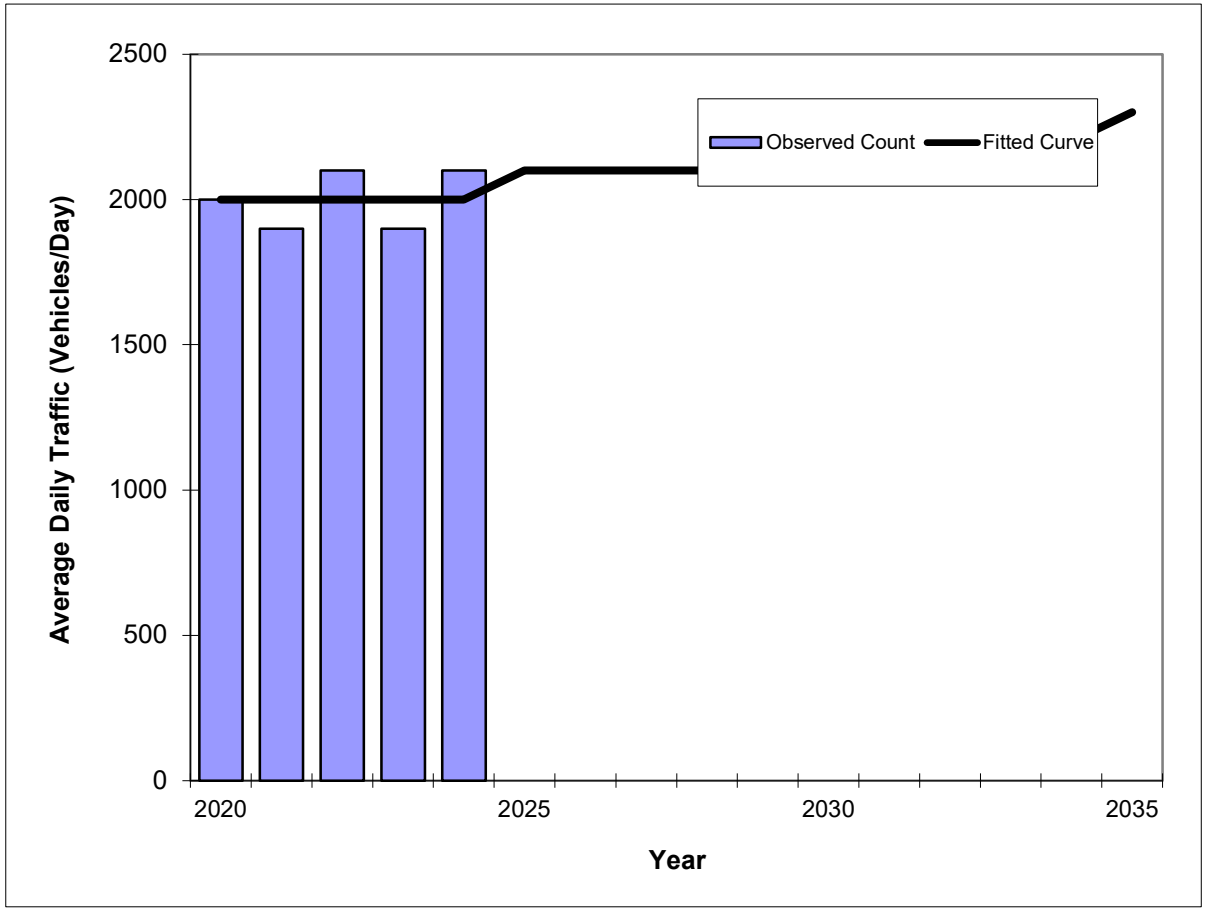
Station_ID	538
Street_Name	ORANGE AVE (ST CLOUD)
From_	US 192-441 (13th St)
To_	Rummel Rd
Roadway_Classification	Collector
DailyTrafficCount2008	0
DailyTrafficCount2009	1,291
DailyTrafficCount2010	0
DailyTrafficCount2012	2,070
DailyTrafficCount2015	1,731
DailyTrafficCount2016	1,862
DailyTrafficCount2017	1,755
DailyTrafficCount2018	1,933
DailyTrafficCount2019	1,841
DailyTrafficCount2020	1,985
DailyTrafficCount2021	1,947
DailyTrafficCount2022	2,054
DailyTrafficCount2023	1,928
DailyTrafficCount2024	2,096
LOS	B
VC	0.23
GlobalID_2	ef555ebe-ed9d-4150-a438-c273361fba1d

Traffic Trends - V03.a

ORANGE AVE -- US 192 to Rummel Rd

FIN#	1234
Location	1

County:	Osceola (92)
Station #:	538
Highway:	ORANGE AVE



Year	Traffic (ADT/AADT) Count*	Trend**
2020	2000	2000
2021	1900	2000
2022	2100	2000
2023	1900	2000
2024	2100	2000
2024 Opening Year Trend		
2024	N/A	2000
2026 Mid-Year Trend		
2026	N/A	2100
2028 Design Year Trend		
2028	N/A	2100
TRANPLAN Forecasts/Trends		

**** Annual Trend Increase:**	20
Trend R-squared:	10.00%
Trend Annual Historic Growth Rate:	0.00%
Trend Growth Rate (2024 to Design Year):	1.25%
Printed:	20-Nov-24
Straight Line Growth Option	

***Axle-Adjusted**

Osceola Traffic Counts Detailed View
Station 517

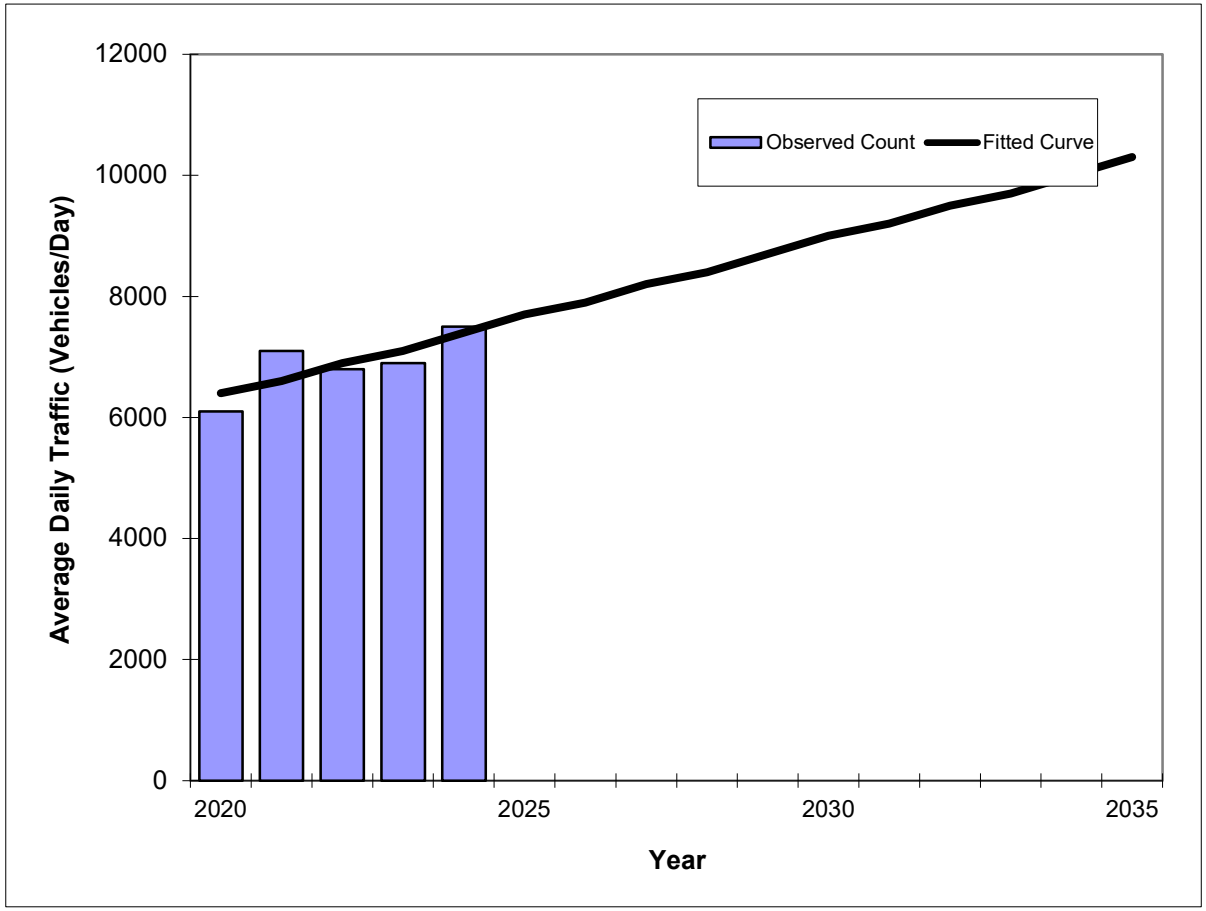
Station_ID	517
Street_Name	RUMMELL RD
From_	Mississippi Ave
To_	Narcoosee Rd (CR 15)
Roadway_Classification	Collector
DailyTrafficCount2008	0
DailyTrafficCount2009	4,386
DailyTrafficCount2010	0
DailyTrafficCount2012	3,710
DailyTrafficCount2015	4,326
DailyTrafficCount2016	4,809
DailyTrafficCount2017	5,523
DailyTrafficCount2018	5,344
DailyTrafficCount2019	6,520
DailyTrafficCount2020	6,128
DailyTrafficCount2021	7,116
DailyTrafficCount2022	6,755
DailyTrafficCount2023	6,891
DailyTrafficCount2024	7,536
LOS	B
VC	0.49
GlobalID_2	230dc71e-4346-4ef4-897e-2498c487bef3

Traffic Trends - V03.a

RUMMELL RD -- Mississippi Ave to Narcoossee Rd

FIN#	1234
Location	1

County:	Osceola (92)
Station #:	517
Highway:	RUMMELL RD



Year	Traffic (ADT/AADT) Count*	Trend**
2020	6100	6400
2021	7100	6600
2022	6800	6900
2023	6900	7100
2024	7500	7400
2024 Opening Year Trend		
2024	N/A	7400
2026 Mid-Year Trend		
2026	N/A	7900
2028 Design Year Trend		
2028	N/A	8400
TRANPLAN Forecasts/Trends		

**** Annual Trend Increase:**	260
Trend R-squared:	64.50%
Trend Annual Historic Growth Rate:	3.91%
Trend Growth Rate (2024 to Design Year):	3.38%
Printed:	20-Nov-24
Straight Line Growth Option	

***Axle-Adjusted**

Osceola Traffic Counts Detailed View
Station 515

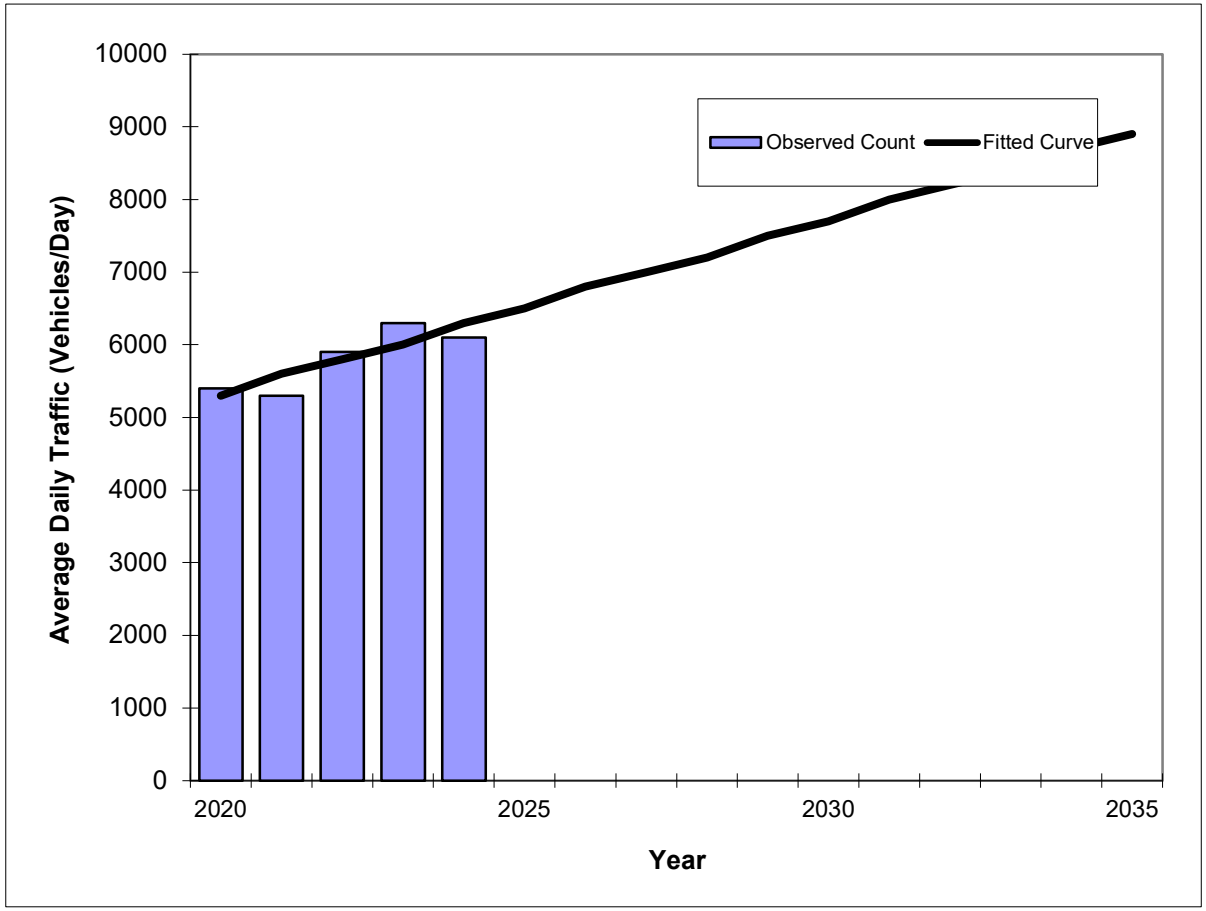
Station_ID	515
Street_Name	10TH ST
From_	Narcoossee Rd (CR 15)
To_	Michigan Ave
Roadway_Classification	Collector
DailyTrafficCount2008	0
DailyTrafficCount2009	2,664
DailyTrafficCount2010	0
DailyTrafficCount2012	2,634
DailyTrafficCount2015	3,831
DailyTrafficCount2016	4,858
DailyTrafficCount2017	4,731
DailyTrafficCount2018	4,714
DailyTrafficCount2019	4,962
DailyTrafficCount2020	5,370
DailyTrafficCount2021	5,301
DailyTrafficCount2022	5,904
DailyTrafficCount2023	6,283
DailyTrafficCount2024	6,084
LOS	B
VC	0.58
GlobalID_2	923d2011-d91f-4623-afb0-aa4ccf6a0911

Traffic Trends - V03.a

10th ST -- Narcoossee Rd to Michigan Ave

FIN#	1234
Location	1

County:	Osceola (92)
Station #:	515
Highway:	10th ST



Year	Traffic (ADT/AADT) Count*	Trend**
2020	5400	5300
2021	5300	5600
2022	5900	5800
2023	6300	6000
2024	6100	6300
2024 Opening Year Trend		
2024	N/A	6300
2026 Mid-Year Trend		
2026	N/A	6800
2028 Design Year Trend		
2028	N/A	7200
TRANPLAN Forecasts/Trends		

**** Annual Trend Increase:**	240
Trend R-squared:	75.79%
Trend Annual Historic Growth Rate:	4.72%
Trend Growth Rate (2024 to Design Year):	3.57%
Printed:	20-Nov-24
Straight Line Growth Option	

***Axle-Adjusted**

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2023 HISTORICAL AADT REPORT

COUNTY: 92 - OSCEOLA

SITE: 5021 - ON US-192, 0.032 MI. E OF CR-523 (VERMONT AV.) (UVL)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2023	41000 X	0	0	9.00	53.20	6.40
2022	39000 E			9.00	53.40	11.80
2021	38000 S	E 18500	W 19500	9.00	54.00	11.80
2020	38000 F	E 18500	W 19500	9.00	53.00	7.60
2019	40000 C	E 19500	W 20500	9.00	53.20	8.80
2018	41000 C	E 20000	W 21000	9.00	53.60	9.40
2017	42500 F	E 21000	W 21500	9.00	52.80	10.10
2016	40500 C	E 20000	W 20500	9.00	52.50	9.40
2015	41000 C	E 20500	W 20500	9.00	52.70	7.80
2014	37500 C	E 18500	W 19000	9.00	52.80	9.00
2013	38000 C	E 18500	W 19500	9.00	53.00	7.90
2012	37000 C	E 18000	W 19000	9.00	53.10	12.50
2011	37500 C	E 18500	W 19000	9.00	53.10	10.40
2010	38500 C	E 20000	W 18500	9.12	53.51	9.90
2009	39000 C	E 20500	W 18500	9.10	53.73	7.80
2008	36500 C	E 19000	W 17500	8.66	53.12	7.60

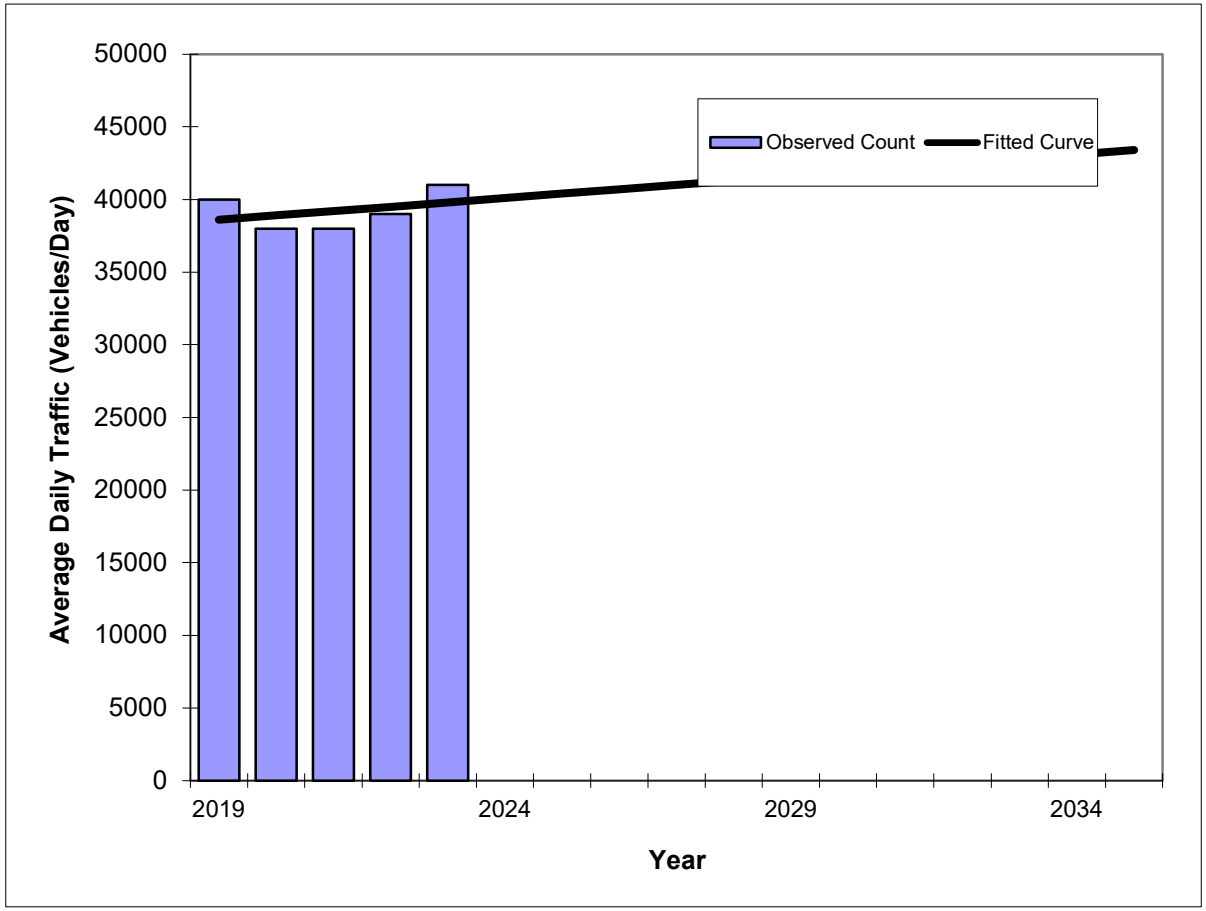
AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Traffic Trends - V03.a

US 192 -- Columbia Ave to Mississippi Ave

FIN#	1234
Location	1

County:	Osceola (92)
Station #:	925021
Highway:	US 192



Year	Traffic (ADT/AADT) Count*	Trend**
2019	40000	38600
2020	38000	38900
2021	38000	39200
2022	39000	39500
2023	41000	39800
2024 Opening Year Trend		
2024	N/A	40100
2026 Mid-Year Trend		
2026	N/A	40700
2028 Design Year Trend		
2028	N/A	41300
TRANPLAN Forecasts/Trends		

**** Annual Trend Increase:**	300
Trend R-squared:	13.24%
Trend Annual Historic Growth Rate:	0.78%
Trend Growth Rate (2023 to Design Year):	0.75%
Printed:	20-Nov-24
Straight Line Growth Option	

***Axle-Adjusted**

Osceola Traffic Counts Detailed View
Station 927

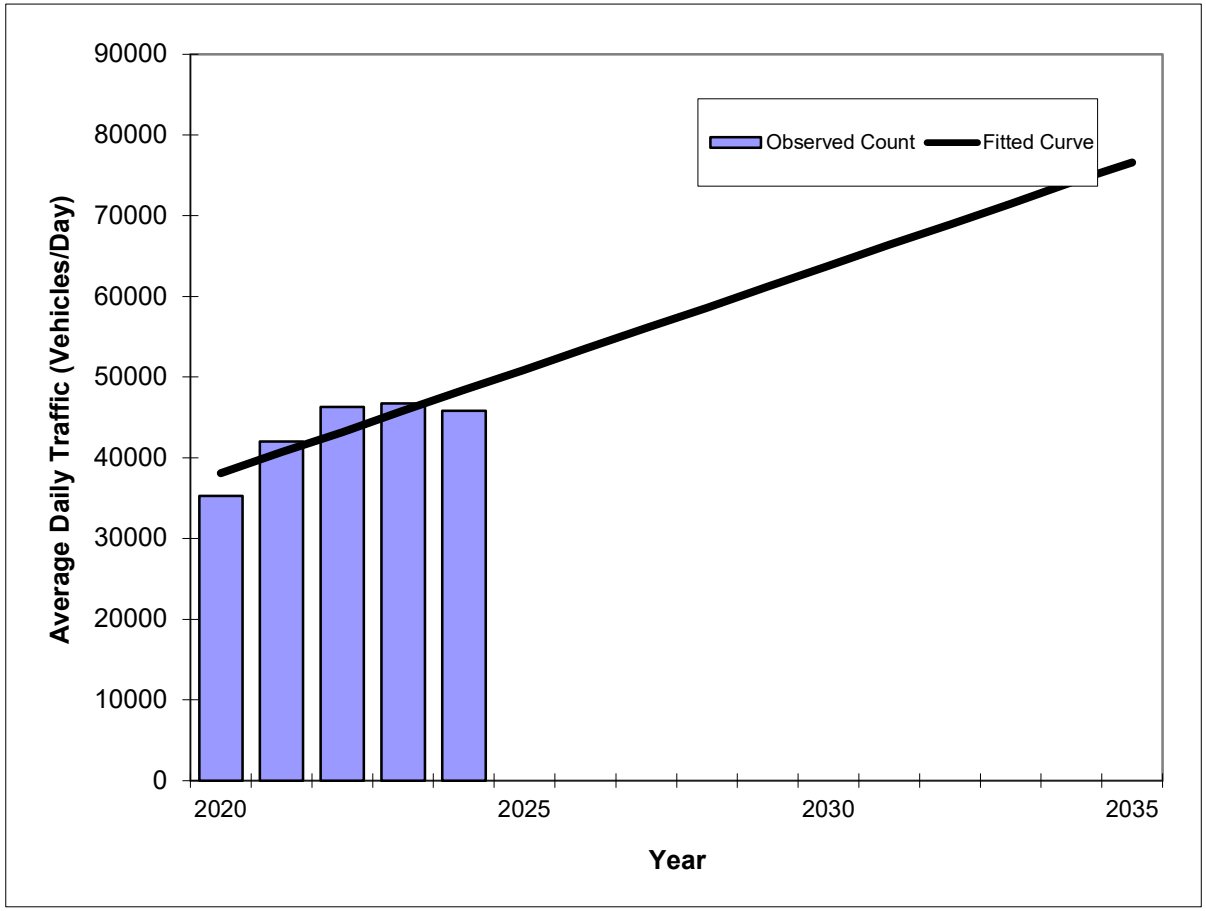
Station_ID	927
Street_Name	US 192 (BRONSON HWY.)
From_	Mississippi Ave
To_	Narcoossee Rd (CR 15)
Roadway_Classification	Principal Art
DailyTrafficCount2008	29,643
DailyTrafficCount2009	27,848
DailyTrafficCount2010	25,916
DailyTrafficCount2012	24,650
DailyTrafficCount2015	27,425
DailyTrafficCount2016	28,717
DailyTrafficCount2017	0
DailyTrafficCount2018	0
DailyTrafficCount2019	0
DailyTrafficCount2020	35,300
DailyTrafficCount2021	42,032
DailyTrafficCount2022	46,318
DailyTrafficCount2023	46,672
DailyTrafficCount2024	45,821
LOS	C
VC	0.6
GlobalID_2	d50fb87a-43f3-4696-81b7-89250fb09847

Traffic Trends - V03.a

US 192 -- Michigan Ave to Narcoossee Rd

FIN#	1234
Location	1

County:	Osceola (92)
Station #:	927
Highway:	US 192



Year	Traffic (ADT/AADT) Count*	Trend**
2020	35300	38100
2021	42000	40700
2022	46300	43200
2023	46700	45800
2024	45800	48400
2024 Opening Year Trend		
2024	N/A	48400
2026 Mid-Year Trend		
2026	N/A	53500
2028 Design Year Trend		
2028	N/A	58600
TRANPLAN Forecasts/Trends		

**** Annual Trend Increase:**	2,570
Trend R-squared:	71.43%
Trend Annual Historic Growth Rate:	6.76%
Trend Growth Rate (2024 to Design Year):	5.27%
Printed:	20-Nov-24

Straight Line Growth Option

***Axle-Adjusted**

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2023 HISTORICAL AADT REPORT

COUNTY: 92 - OSCEOLA

SITE: 0255 - ON US-192, 0.333 MI. E OF CR-15 (RCLP)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2023	41500 F	E 20500	W 21000	9.00	53.20	10.60
2022	39500 C	E 19500	W 20000	9.00	53.40	10.60
2021	29000 S	E 14500	W 14500	9.00	54.00	10.70
2020	29000 F	E 14500	W 14500	9.00	53.00	10.70
2019	30000 C	E 15000	W 15000	9.00	53.20	10.70
2018	29000 F	E 14500	W 14500	9.00	53.60	10.80
2017	28000 C	E 14000	W 14000	9.00	52.80	10.80
2016	24500 F	E 12000	W 12500	9.00	52.50	8.40
2015	23500 C	E 11500	W 12000	9.00	52.70	8.40
2014	24500 C	E 11500	W 13000	9.00	52.80	9.20
2013	19500 C	E 9800	W 9700	9.00	53.00	8.70
2012	20400 C	E 10500	W 9900	9.00	53.10	22.80
2011	21500 C	E 11000	W 10500	9.00	53.10	20.20
2010	22000 C	E 11000	W 11000	9.12	53.51	13.40
2009	22000 C	E 11000	W 11000	9.10	53.73	11.40
2008	21000 C	E 10500	W 10500	8.66	53.12	11.00

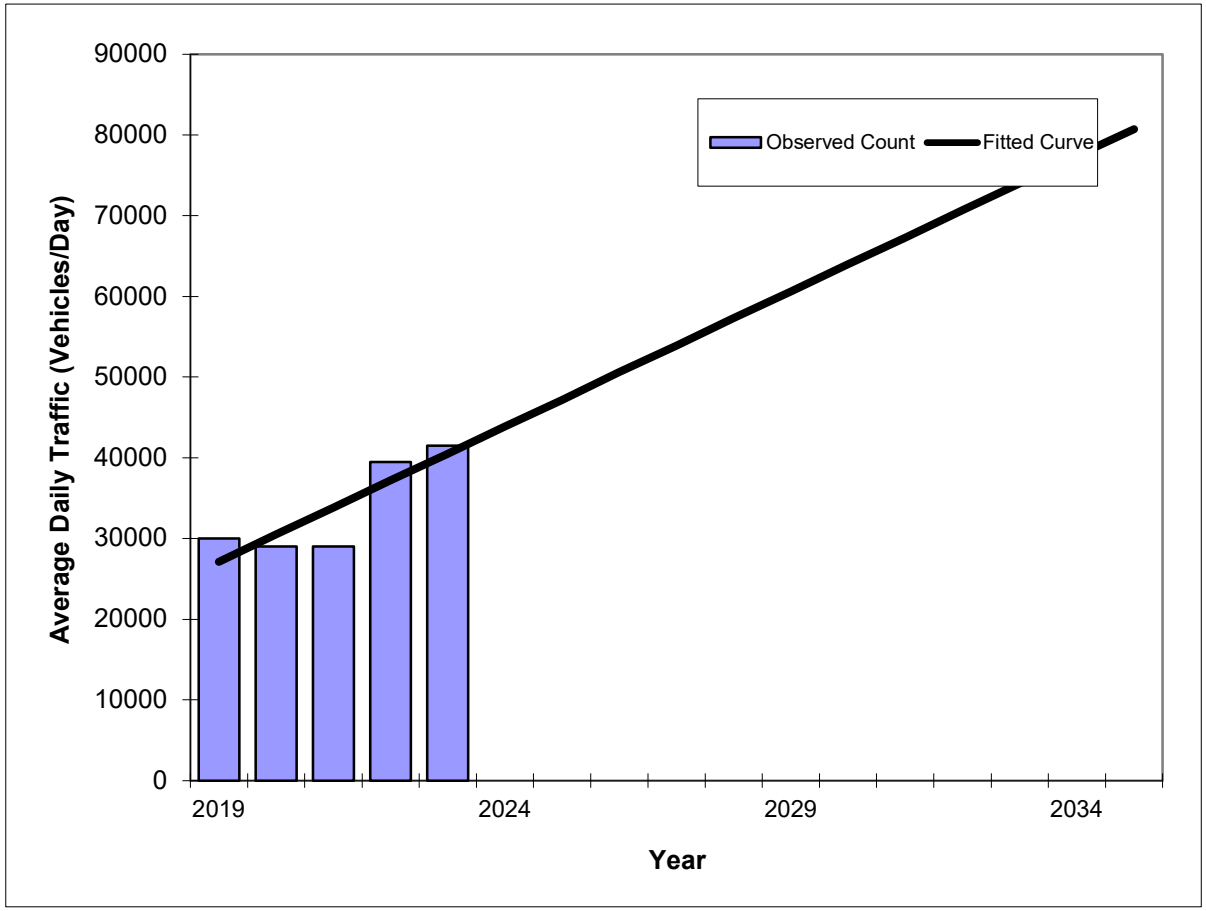
AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Traffic Trends - V03.a

US 192 -- Mississippi Ave to Narcoossee Rd

FIN#	1234
Location	1

County:	Osceola (92)
Station #:	920255
Highway:	US 192



Year	Traffic (ADT/AADT) Count*	Trend**
2019	30000	27100
2020	29000	30500
2021	29000	33800
2022	39500	37200
2023	41500	40500
2024 Opening Year Trend		
2024	N/A	43900
2026 Mid-Year Trend		
2026	N/A	50600
2028 Design Year Trend		
2028	N/A	57300
TRANPLAN Forecasts/Trends		

**** Annual Trend Increase:**	3,350
Trend R-squared:	73.69%
Trend Annual Historic Growth Rate:	12.36%
Trend Growth Rate (2023 to Design Year):	8.30%
Printed:	20-Nov-24

Straight Line Growth Option

***Axle-Adjusted**

Osceola Traffic Counts Detailed View
Station 909

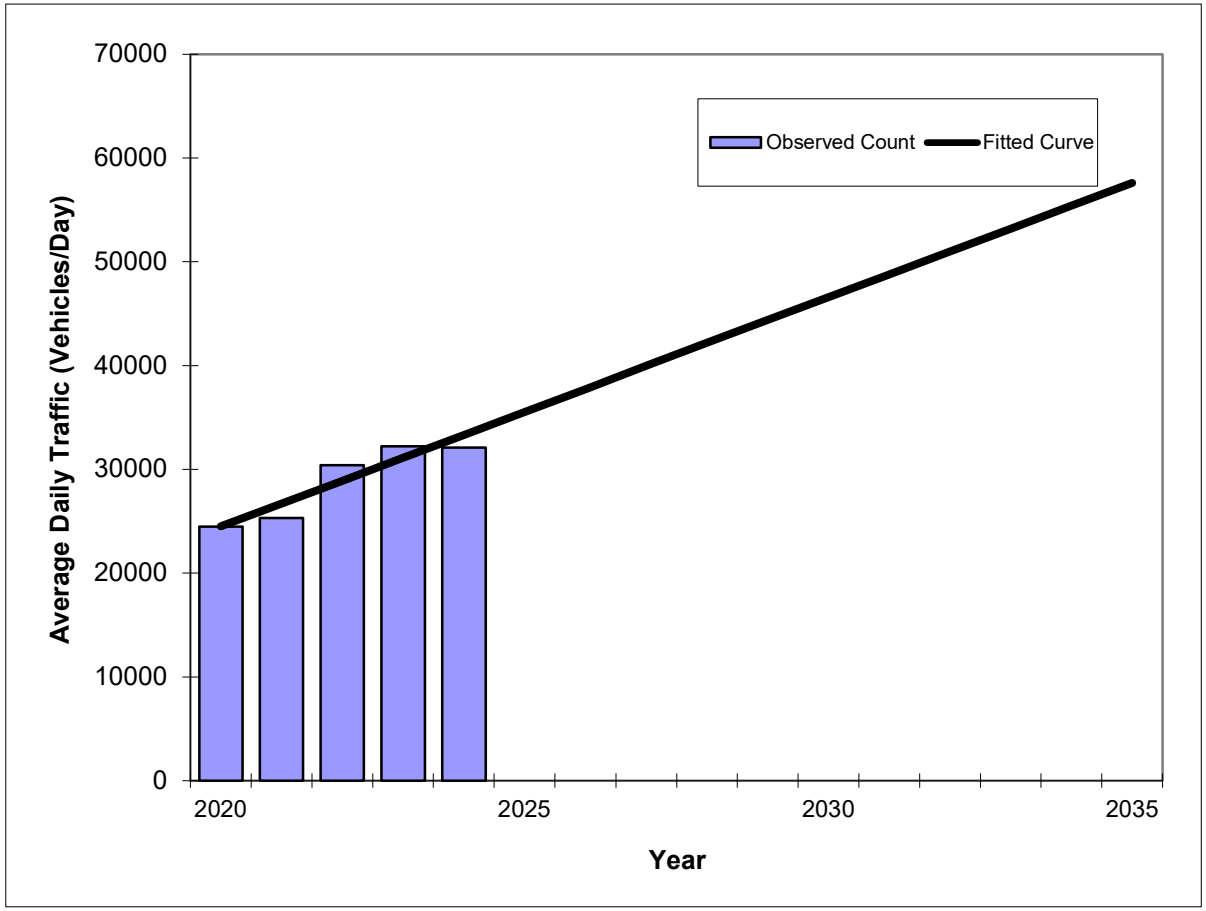
Station_ID	909
Street_Name	US 192 (BRONSON HWY.)
From_	Nova Rd (CR 532)
To_	Old Melbourne Hwy
Roadway_Classification	Principal Art
DailyTrafficCount2008	0
DailyTrafficCount2009	0
DailyTrafficCount2010	0
DailyTrafficCount2012	19,803
DailyTrafficCount2015	21,246
DailyTrafficCount2016	22,280
DailyTrafficCount2017	24,360
DailyTrafficCount2018	24,396
DailyTrafficCount2019	22,880
DailyTrafficCount2020	24,527
DailyTrafficCount2021	25,266
DailyTrafficCount2022	30,375
DailyTrafficCount2023	32,179
DailyTrafficCount2024	32,123
LOS	B
VC	0.38
GlobalID_2	18db7f1f-27bb-4bbf-bfce-1a095d6e6181

Traffic Trends - V03.a

US 192 -- Nova Rd to Old Melbourne Hwy

FIN#	1234
Location	1

County:	Osceola (92)
Station #:	909
Highway:	US 192



Year	Traffic (ADT/AADT) Count*	Trend**
2020	24500	24500
2021	25300	26700
2022	30400	28900
2023	32200	31100
2024	32100	33300
2024 Opening Year Trend		
2024	N/A	33300
2026 Mid-Year Trend		
2026	N/A	37700
2028 Design Year Trend		
2028	N/A	42200
TRANPLAN Forecasts/Trends		

**** Annual Trend Increase:**	2,210
Trend R-squared:	87.69%
Trend Annual Historic Growth Rate:	8.98%
Trend Growth Rate (2024 to Design Year):	6.68%
Printed:	20-Nov-24

Straight Line Growth Option

***Axle-Adjusted**

Appendix G
Vested Trips

EDEN – ST. CLOUD
Project № 23093.1 v1.2
November 2024

TRAFFIC IMPACT ANALYSIS
CITY OF ST. CLOUD
FLORIDA

Prepared by:

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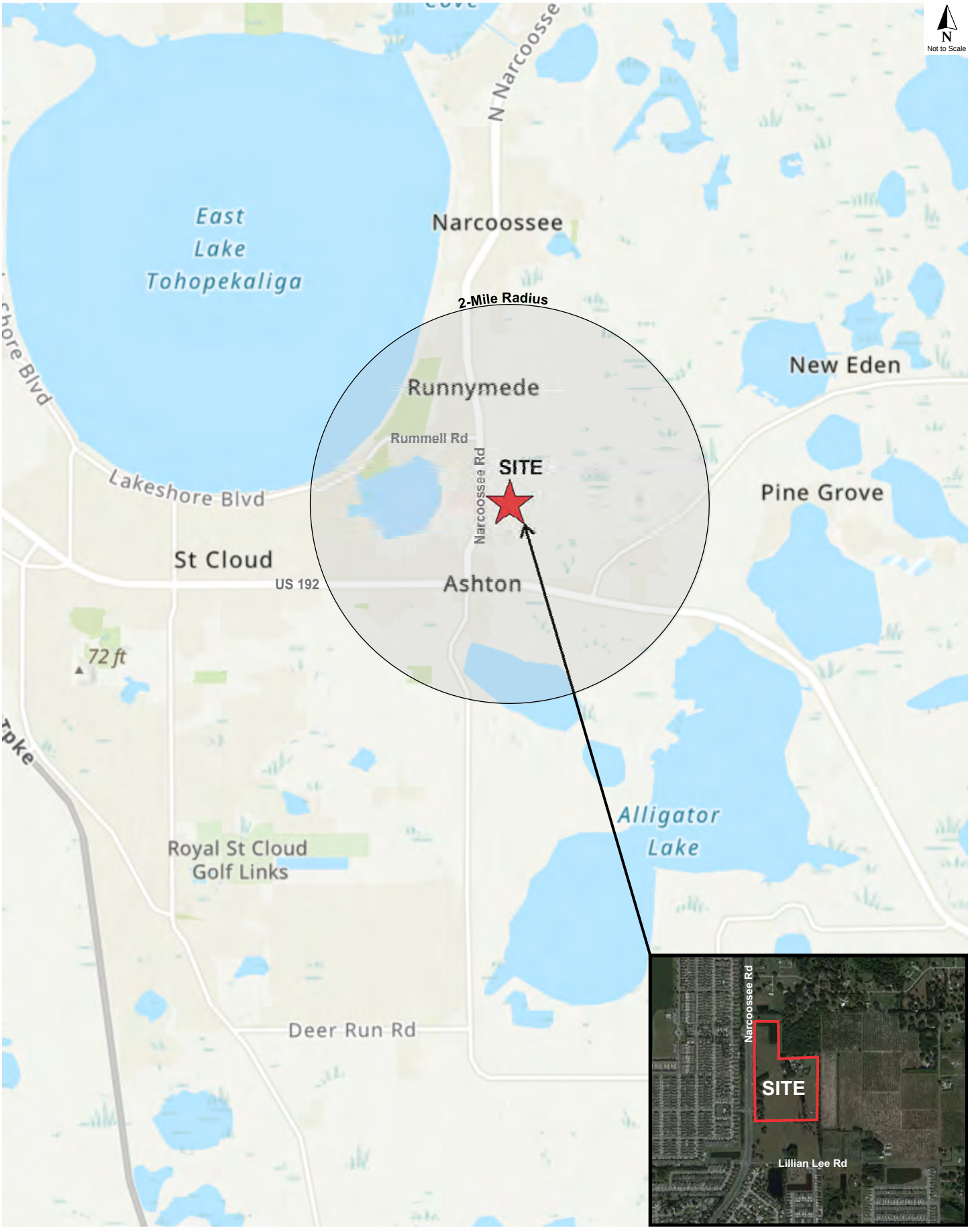
Orlando, Florida 32803
www.trafficmobility.com
(407) 531-5332

Prepared for:
Eden Living Development Services LLC
2801 Southwest 31st Avenue, Suite 2B
Coconut Grove, Florida 33133



TMC
Traffic & Mobility Consultants

Site Location Map
Eden - St. Cloud
23093.1 v1.2

Figure
1

Table 4
Projected Roadway Segment Capacity Analysis

Roadway Segment	Count Sta	No Lns	PkDir Cap	Dir	Existing Vol	Existing LOS	Existing V/C	Historical GR	Historical Vol	a. Vest Vol	a. Vest Eqvlt GR	Max Vol	Exist + Max Vol	b. Vest 3-Projs	2026 Background Vol	2026 Background LOS	2026 Background V/C	2026 Buildout Distr	2026 Buildout In/O	2026 Buildout Trips	2026 Buildout Vol	2026 Buildout LOS	2026 Buildout V/C
Hickory Tree Rd																							
US 192 to Nolte Rd	540	2	870	NB	546	C	0.91	6.06%	66	175	6.9%	175	721	38	759	C	1.06	10%	in	7	766	C	1.06
				SB	793	C			96	103		103	896	23	919	F			out	4	923	F	
Lake Lizzie Dr																							
Nora Tyson Rd to Nova Rd	TMC[1]	2	600	EB	107	B	0.18	5.00%	11	49	20.7%	49	156	4	160	B	0.27	0%	out	0	160	B	0.27
				WB	17	B			2	28		28	45	8	53	B			in	0	53	B	
Nova Rd to Pine Grove Rd	TMC[1]	2	600	EB	38	B	0.06	5.00%	4	1	1.3%	4	42	0	42	B	0.07	0%	out	0	42	B	0.07
				WB	13	B			1	1		1	14	0	14	B			in	0	14	B	
Lillian Lee Rd																							
Narcoossee Road to Nora Tyson Road	TMC[2]	2	600	EB	65	B	0.28	5.00%	7	43	10.6%	43	108	201	309	B	0.53	2%	out	1	311	B	0.53
				WB	167	B			17	31		31	198	118	316	B			in	1	317	B	
Narcoossee Rd																							
Jones Rd to Rummel Rd	539	4	3,320	NB	1,415	B	0.56	5.79%	164	137	3.7%	164	1579	45	1,624	B	0.65	35%	out	15	1,639	B	0.65
				SB	1,845	C			214	226		226	2071	76	2,147	C			in	25	2,172	C	
Rummel Rd to 10th St	541	4	1,850	NB	1,233	B	0.86	5.00%	123	137	4.3%	137	1370	141	1,511	C	1.03	60%	in	43	1,553	C	1.04
				SB	1,584	C			158	226		226	1810	92	1,902	F			out	25	1,927	F	
10th St to US 192-441	589	4	1,850	NB	1,339	B	0.80	6.25%	167	141	4.4%	167	1506	113	1,619	C	0.96	50%	in	36	1,655	C	0.97
				SB	1,473	C			184	234		234	1707	66	1,773	C			out	21	1,794	D	
Nora Tyson Rd																							
US 192 to Lillian Lee Rd	TMC[1]	2	600	NB	65	B	0.11	5.00%	7	40	21.5%	40	105	65	170	B	0.28	2%	in	1	172	B	0.29
				SB	53	B			5	36		36	89	25	114	B			out	1	114	B	
Lillian Lee Rd to Northern Limits	TMC[1]	2	600	NB	3	B	0.01	5.00%	0	0	0.0%	0	3	88	91	B	0.15	0%	out	0	91	B	0.15
				SB	1	B			0	0		0	1	51	52	B			in	0	52	B	
Nova Rd																							
US 192 to Lake Lizzie Dr	9011	2	1,140	NB	402	C	0.35	7.74%	62	248	17.1%	248	650	26	676	C	0.59	10%	out	4	680	C	0.60
				SB	380	B			59	152		152	532	41	573	C			in	7	580	C	
Lake Lizzie Dr to Eden Dr	542	2	1,140	NB	274	B	0.24	7.74%	42	248	24.7%	248	522	26	548	B	0.48	10%	out	4	551	B	0.48
				SB	266	B			41	152		152	418	41	459	B			in	7	466	B	
Old Hickory Tree Rd																							
Nolte Rd to US 192	529	2	830	NB	366	B	0.49	5.00%	37	55	4.1%	55	421	20	441	B	0.55	10%	in	7	448	B	0.55
				SB	405	B			41	39		41	444	11	455	B			out	4	459	B	
US 192 to Tenth St	TMC[2]	2	830	NB	244	B	0.29	9.72%	47	0	0.0%	47	291	0	291	B	0.35	0%	in	0	291	B	0.35
				SB	189	B			37	0		37	189	0	189	B			out	0	190	B	
***Puffin Rd**																							
US 192 to Lillian Lee Rd	TMC[1]	2	1,140	NB	3	B	0.00	5.00%	0	7	119.0%	7	10	91	101	B	0.08	0%	in	0	101	B	0.08
				SB	1	B			0	8		8	9	78	87	B			out	0	87	B	
Rummell Rd																							
Mississippi Ave to Narcoossee Rd	517	2	830	EB	294	B	0.46	5.00%	29	0	0.0%	29	323	0	323	B	0.46	5%	in	4	327	B	0.46
				WB	379	B			38	0		38	379	0	379	B			out	2	381	B	
Tenth (10th) St																							
Michigan Ave to Narcoossee Rd	515	2	600	EB	351	C	0.59	5.00%	35	8	0.7%	35	386	20	406	C	0.68	8%	in	6	412	C	0.69
				WB	307	B			31	5		31	312	11	323	B			out	3	326	B	
US 192																							
Mississippe Ave to Narcoossee Rd / Hickory Tree Rd	927	6	2,810	EB	1,769	C	0.67	7.92%	280	482	7.1%	482	2251	160	2,411	D	0.81	25%	in	18	2,428	D	0.81
				WB	1,871	C			296	297		297	2168	95	2,263	D			out	11	2,273	D	
Narcoossee Rd / Hickory Tree Rd to Nova Rd (CR 532)	920255[3]	6	4,980	EB	1,657	B	0.38	5.67%	188	797	12.0%	797	2454	96	2,550	B	0.50	15%	out	6	2,556	B	0.50
				WB	1,898	B			215	484		484	2382	90	2,472	B			in	11	2,483	B	
Nova Rd (CR 532) to Old Melbourne Hwy	909	4	3,320	EB	1,281	B	0.39	7.60%	195	413	10.9%	413	1694	30	1,724	B	0.52	5%	out	2	1,726	B	0.52
				WB	1,184	B			180	390		390	1574	49	1,623	B			in	4	1,627	B	

Sources: Osceola County's 2023 Roadway Network Capacity Report and Florida Traffic Online

(1) TMC - Turning Movement Counts were obtained from Lakeside at Satilla TIA v2.2 and a 5% growth was applied to derive 2023 volumes

(2) TMC - Turning Movement Counts were obtained by TMC from study intersections during PM peak hour in 2024; 1.05 seasonal factor was applied.

(3) Existing volume obtained from Florida Traffic Online AADT multiplied by K Factor and D Factor

***LOS standard and Peak Hour Capacity based on similar 2-lane segment of Tenth (10th) St*

Lakeside at Satilla, Tyson Reserve, and The Exchange Apartments Vested Trips

				PM Peak			PM Peak			PM Peak			
				in	out		in	out		in	out		
				234	137		76	44		71	46		
No.	Roadway Segment	Count Sta No.	Dir	Lakeside at Satilla Dist	Vol	Dir	Tyson Reserve Dist	Vol	Dir	The Exchange Apartments Dist	Vol	Dir	Planned Devel Vol
	Hickory Tree Rd												
1	US 192 to Nolte Rd	540	NB	10%	23	IN	10%	8	IN	10%	7	IN	38
			SB		14	OUT		4	OUT		5	OUT	23
2	Nolte Rd to Deer Run	540	NB	10%	23	IN	5%	4	IN	7%	5	IN	32
			SB		14	OUT		2	OUT		3	OUT	19
	Lake Lizzie Dr												
3	Nora Tyson Rd to Nova Rd	TMC1	EB	0%	0	OUT	10%	4	OUT	0%	0	OUT	4
			WB		0	IN		8	IN		0	IN	8
4	Nova Rd to Pine Grove Rd	TMC1	EB	0%	0	OUT	0%	0	OUT	0%	0	OUT	0
			WB		0	IN		0	IN		0	IN	0
	Lillian Lee Rd												
5	Narcoossee Rd to Nora Tyson Rd	TMC2	EB	70%	164	IN	30%	23	IN	20%	14	IN	201
			WB		96	OUT		13	OUT		9	OUT	118
	Narcoossee Rd												
6	Jones Rd to Rummell Rd	539	NB	20%	27	OUT	20%	9	OUT	20%	9	OUT	45
			SB		47	IN		15	IN		14	IN	76
7	Rummell Rd to 10th St	541	NB	50%	117	IN	20%	15	IN	20%	9	OUT	141
			SB		69	OUT		9	OUT		14	IN	92
8	10th St to US 192	589	NB	45%	105	IN	5%	4	IN	5%	4	IN	113
			SB		62	OUT		2	OUT		2	OUT	66
	Nolte Rd												
9	Michigan Ave to Hickory Tree Rd	542	EB	5%	12	IN	5%	4	IN	4%	3	IN	19
			WB		7	OUT		2	OUT		2	OUT	11
	Nora Tyson Rd												
10a	US 192 to Lillian Lee Rd	TMC2	NB	15%	35	IN	40%	30	IN	0%	0	IN	65
			SB	5%	7	OUT		18	OUT		0	OUT	25
10b	Lillian Lee Rd to Northern Limits	TMC2	NB	10%	23	IN	85%	65	IN	0%	0	OUT	88
			SB		14	OUT		37	OUT		0	IN	51
	Nova Rd												
11	US 192 to Eden Dr	542	NB	10%	14	OUT	15%	7	OUT	10%	5	OUT	26
			SB		23	IN		11	IN		7	IN	41
	Old Hickory Tree Rd												
12	Nolte Rd to US 192	529	NB	5%	12	IN	5%	4	IN	5%	4	IN	20
			SB		7	OUT		2	OUT		2	OUT	11
13	US 192 to Tenth St	TMC2	NB	0%	0	IN	0%	0	IN	0%	0	IN	0
			SB		0	OUT		0	OUT		0	OUT	0
	Pine Grove Rd												
14	US 192 to Nova Rd	543	NB	0%	0	OUT	0%	0	OUT	0%	0	OUT	0
			SB		0	IN		0	IN		0	IN	0
	Puffin Rd												
15	US 192 to Lillian Lee Rd	543	NB	15%	21	IN	30%	13	IN	80%	57	IN	91
			SB	25%	34	OUT	15%	7	OUT		37	OUT	78
	Rummell Rd												
16	Mississippi Ave to Narcoossee Rd	517	EB	0%	0	IN	0%	0	IN	0%	0	IN	0
			WB		0	OUT		0	OUT		0	OUT	0
	Tenth (10th) St												
17	Michigan Ave to Narcoossee Rd	515	EB	5%	12	IN	5%	4	IN	5%	4	IN	20
			WB		7	OUT		2	OUT		2	OUT	11
	US 192												
18	Mississippi Ave to Narcoossee Rd	927	EB	45%	105	IN	35%	27	IN	40%	28	IN	160
		920155	WB		62	OUT		15	OUT		18	OUT	95
19	Narcoossee Rd to Nova Rd	920255	EB	20%	27	OUT	40%	30	IN	55%	39	IN	96
			WB		47	IN		18	OUT		25	OUT	90
20	Nova Rd to Old Melbourne Hwy	909	EB	10%	14	OUT	20%	9	OUT	15%	7	OUT	30
		920302	WB		23	IN		15	IN		11	IN	49

Table 1
Existing Roadway Segment Capacity Analysis

No.	Roadway Segment	Count Sta No.	Count Source	# of Lns	LOS Std	PH Dir Cap	Dir	Existing Vol	V/C	LOS
	Hickory Tree Rd									
1	US 192 to Nolte Rd	540	OC	2	D	870	NB SB	516 785	0.59 0.90	C C
2	Nolte Rd to Deer Rd	548	OC	2	D	1,140	NB SB	462 713	0.41 0.63	C C
	Lake Lizzie Dr									
3	Nora Tyson Rd to Nova Rd #	TMC1	OC	2	D	600	EB WB	102 16	0.17 0.03	B B
4	Nova Rd to Pine Grove Rd #	TMC1	OC	2	D	600	EB WB	36 12	0.06 0.02	B B
	Lillian Lee Rd									
5	Narcoossee Rd to Nora Tyson Rd #	TMC2	OC	2	D	600	EB WB	192 51	0.32 0.09	B B
	Narcoossee Rd									
6	Jones Rd to Rummell Rd	539	OC	4	D	3,320	NB SB	1,757 1,891	0.53 0.57	B C
7	Rummell Rd to 10th St	541	OC	4	D	1,850	NB SB	1,223 1,584	0.66 0.86	B C
8	10th St to US 192	589	OC	4	D	1,850	NB SB	1,183 1,460	0.64 0.79	B B
	Nolte Rd									
9	Michigan Ave to Hickory Tree Rd	NA4	OC	4	D	1,850	EB WB	604 678	0.33 0.37	B B
	Nora Tyson Rd									
10a	US 192 to Lillian Lee Rd	TMC2	OC	2	D	600	NB SB	62 50	0.10 0.08	B B
10b	Lillian Lee Rd to Northern Limits	TMC2	OC	2	D	600	NB SB	3 1	0.01 0.00	B B
	Nova Rd									
11	US 192 to Eden Dr	542	OC	2	D	1,140	NB SB	240 214	0.21 0.19	B B
	Old Hickory Tree Rd									
12	Nolte Rd to US 192	529	OC	2	D	830	NB SB	357 407	0.43 0.49	B B
13	US 192 to Tenth St	TMC2	OC	2	D	830	NB SB	226 172	0.27 0.21	B B
	Pine Grove Rd									
14	US 192 to Nova Rd	543	OC	2	D	1,140	EB WB	219 141	0.19 0.12	B B
	Puffin Rd									
15	US 192 to Lillian Lee Rd-	--	--	2	D	1,140	NB SB	3 1	0.00 0.00	B B
	Rummell Rd									
16	Mississippi Ave to Narcoossee Rd	517	OC	2	D	830	EB WB	325 319	0.39 0.38	B B
	Tenth (10th) St									
17	Michigan Ave to Narcoossee Rd	515	OC	2	D	600	EB WB	333 270	0.56 0.45	B B
	US 192									
18	Mississippi Ave to Narcoossee Rd / Hickory Tree Rd	927	OC	6	D	2,810	EB WB	1,778 1,841	0.63 0.66	C C
19	Narcoossee Rd / Hickory Tree Rd to Nova Rd*	920255*	FDOT	6	D	4,980	EB WB	1,409 1,201	0.28 0.24	B B
20	Nova Rd to Old Melbourne Hwy	909	OC	4	D	3,320	EB WB	1,086 1,144	0.33 0.34	B B

Source: 2022 Roadway Network Capacity Report

**Existing volume obtained from Florida Traffic Online AADT multiplied by K Factor and D Factor*

-The capacity for Pine Grove Road was used.

 # The capacity for 10th Street was used.

Project No. 23093.1 Eden - St Cloud

Intersection Volumes

Period	Tgen	Enter	Exit	SF	Pass By	Enter	Exit	Legend
AM Peak		21	68	1.05		0	0	Existing + {Vested} + (Project) = Total

Intersection= US 192 and Nova Rd — 7

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	Vested	% PB Ent	% PB Ext	Passby	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	192	1.05	**202**	1.000		**202**	29			**0**		10%	**7**	**238**	**202 + {29} + (7) = 238**
EB	T	779	1.05	**818**	1.000		**818**	37			**0**		5%	**3**	**858**	**818 + {37} + (3) = 858**
	R	0	1.05	**0**	1.000		**0**	0			**0**			**0**	**0**	
	L	0	1.05	**0**	1.000		**0**	0			**0**			**0**	**0**	
WB	T	1105	1.05	**1,160**	1.000		**1160**	11			**0**	5%		**1**	**1172**	**1160 + {11} + (1) = 1172**
	R	32	1.05	**34**	1.000		**34**	3			**0**			**0**	**37**	**34 + {3} = 37**
	L	0	1.05	**0**	1.000		**0**	0			**0**			**0**	**0**	
NB	T	0	1.05	**0**	1.000		**0**	0			**0**			**0**	**0**	
	R	0	1.05	**0**	1.000		**0**	0			**0**			**0**	**0**	
	L	17	1.05	**18**	1.000		**18**	10			**0**			**0**	**28**	**18 + {10} = 28**
SB	T	0	1.05	**0**	1.000		**0**	0			**0**			**0**	**0**	
	R	341	1.05	**358**	1.000		**358**	10			**0**	10%		**2**	**370**	**358 + {10} + (2) = 370**

Intersection= Narcoossee Rd and Project Access A/Terrapin Blvd — 8

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	Vested	% PB Ent	% PB Ext	Passby	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	25	1.00	**25**	1.000		**25**	0			**0**			**0**	**25**	**25**
EB	T	0	1.00	**0**	1.000		**0**	0			**0**			**0**	**0**	
	R	32	1.00	**32**	1.000		**32**	0			**0**			**0**	**32**	**32**
	L	0	1.00	**0**	1.000		**0**	0			**0**		45%	**31**	**31**	**(31)**
WB	T	0	1.00	**0**	1.000		**0**	0			**0**			**0**	**0**	
	R	0	1.00	**0**	1.000		**0**	0			**0**		30%	**20**	**20**	**(20)**
	L	14	1.00	**14**	1.000		**14**	0			**0**			**0**	**14**	**14**
NB	T	1461	1.00	**1,461**	1.000		**1461**	107			**0**		10%	**8**	**1576**	**1461 + {107} + (8) = 1576**
	R	0	1.00	**0**	1.000		**0**	0			**0**	37%		**8**	**8**	**(8)**
	L	0	1.00	**0**	1.000		**0**	0			**0**	30%		**5**	**5**	**(5)**
SB	T	1074	1.00	**1,074**	1.000		**1074**	24			**0**	10%		**2**	**1100**	**1074 + {24} + (2) = 1100**
	R	7	1.00	**7**	1.000		**7**	0			**0**			**0**	**7**	**7**

Intersection= Narcoossee Rd and Project Access B/Tilapia Dr — 9

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	Vested	% PB Ent	% PB Ext	Passby	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	17	1.00	**17**	1.000		**17**	0			**0**			**0**	**17**	**17**
EB	T	0	1.00	**0**	1.000		**0**	0			**0**			**0**	**0**	
	R	72	1.00	**72**	1.000		**72**	0			**0**			**0**	**72**	**72**
	L	0	1.00	**0**	1.000		**0**	0			**0**		15%	**9**	**9**	**(9)**
WB	T	0	1.00	**0**	1.000		**0**	0			**0**			**0**	**0**	
	R	0	1.00	**0**	1.000		**0**	0			**0**		10%	**8**	**8**	**(8)**
	L	24	1.00	**24**	1.000		**24**	0			**0**			**0**	**24**	**24**
NB	T	1557	1.00	**1,557**	1.000		**1557**	107			**0**	37%		**8**	**1672**	**1557 + {107} + (8) = 1672**
	R	0	1.00	**0**	1.000		**0**	0			**0**	18%		**5**	**5**	**(5)**
	L	0	1.00	**0**	1.000		**0**	0			**0**	10%		**2**	**2**	**(2)**
SB	T	1105	1.00	**1,105**	1.000		**1105**	24			**0**		45%	**31**	**1160**	**1105 + {24} + (31) = 1160**
	R	1	1.00	**1**	1.000		**1**	0			**0**			**0**	**1**	**1**

Project No. 23093.1 Eden - St Cloud

Intersection Volumes

Period	Tgen	Enter	Exit	Pass By	Enter	Exit	SF	Legend
PM Peak		70	42		0	0	1.05	Existing + {Vested} + (Project) = Total

Intersection= Rummell Rd and Narcoossee Rd — 1

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	Vested	% PB Ent	% PB Ext	Passby	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	268	1.05	281	1.000		281	0			0			0	281	281
EB	T	13	1.05	14	1.000		14	0			0			0	14	14
	R	42	1.05	44	1.000		44	0			0	5%		3	47	44 + (3) = 47
	L	17	1.05	18	1.000		18	0			0			0	18	18
WB	T	21	1.05	22	1.000		22	0			0			0	22	22
	R	17	1.05	18	1.000		18	0			0			0	18	18
	L	37	1.05	39	1.000		39	0			0		5%	2	41	39 + (2) = 41
NB	T	1256	1.05	1,319	1.000		1319	45			0		35%	14	1378	1319 + {45} + (14) = 1378
	R	21	1.05	22	1.000		22	0			0			0	22	22
	L	20	1.05	21	1.000		21	0			0			0	21	21
SB	T	1614	1.05	1,695	1.000		1695	76			0	35%		25	1796	1695 + {76} + (25) = 1796
	R	220	1.05	231	1.000		231	0			0			0	231	231

Intersection= Lillian Lee Rd and Narcoossee Rd — 2

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	Vested	% PB Ent	% PB Ext	Passby	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	5	1.05	5	1.000		5	0			0			0	5	5
EB	T	0	1.05	0	1.000		0	0			0			0	0	
	R	12	1.05	13	1.000		13	0	35%		0			0	13	13
	L	16	1.05	17	1.000		17	73	65%		0		5%	2	92	17 + {73} + (2) = 92
WB	T	2	1.05	2	1.000		2	0		65%	0			0	2	2
	R	44	1.05	46	1.000		46	45			0	2%		2	93	46 + {45} + (2) = 93
	L	42	1.05	44	1.000		44	0			0			0	44	44
NB	T	1389	1.05	1,458	1.000		1458	0			0	53%		36	1494	1458 + (36) = 1494
	R	63	1.05	66	1.000		66	125		100%	0	5%		4	195	66 + {125} + (4) = 195
	L	96	1.05	101	1.000		101	76			0		2%	1	178	101 + {76} + (1) = 178
SB	T	1647	1.05	1,729	1.000		1729	0			0		58%	23	1752	1729 + (23) = 1752
	R	11	1.05	12	1.000		12	0			0			0	12	12

Intersection= Tenth (10th) Street and Narcoossee Rd — 3

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	Vested	% PB Ent	% PB Ext	Passby	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	171	1.05	180	1.000		180	16			0	8%		4	200	180 + {16} + (4) = 200
EB	T	7	1.05	7	1.000		7	0			0			0	7	7
	R	87	1.05	91	1.000		91	4			0			0	95	91 + {4} = 95
	L	20	1.05	21	1.000		21	0			0			0	21	21
WB	T	3	1.05	3	1.000		3	0			0			0	3	3
	R	25	1.05	26	1.000		26	0			0			0	26	26
	L	89	1.05	93	1.000		93	2			0			0	95	93 + {2} = 95
NB	T	1303	1.05	1,368	1.000		1368	109			0	48%		32	1509	1368 + {109} + (32) = 1509
	R	69	1.05	72	1.000		72	0			0			0	72	72
	L	27	1.05	28	1.000		28	0			0			0	28	28
SB	T	1569	1.05	1,647	1.000		1647	64			0		48%	19	1730	1647 + {64} + (19) = 1730
	R	86	1.05	90	1.000		90	9			0		8%	4	103	90 + {9} + (4) = 103

Intersection= US 192 and Orange Avenue — 4

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	Vested	% PB Ent	% PB Ext	Passby	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	46	1.05	48	1.000		48	0			0			0	48	48
EB	T	1701	1.05	1,786	1.000		1786	141			0	15%		11	1938	1786 + {141} + (11) = 1938
	R	14	1.05	15	1.000		15	0			0			0	15	15
	L	16	1.05	17	1.000		17	0			0			0	17	17
WB	T	1690	1.05	1,775	1.000		1775	83			0		15%	6	1864	1775 + {83} + (6) = 1864
	R	8	1.05	8	1.000		8	0			0			0	8	8
	L	4	1.05	4	1.000		4	0			0			0	4	4
NB	T	2	1.05	2	1.000		2	0			0			0	2	2
	R	24	1.05	25	1.000		25	0			0			0	25	25
	L	7	1.05	7	1.000		7	0			0			0	7	7
SB	T	1	1.05	1	1.000		1	0			0			0	1	1
	R	27	1.05	28	1.000		28	0			0			0	28	28

Intersection= US 192 and Old Hickory Tree Rd — 5

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	Vested	% PB Ent	% PB Ext	Passby	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	108	1.05	113	1.000		113	0			0			0	113	113
EB	T	1656	1.05	1,739	1.000		1739	141			0	15%		11	1891	1739 + {141} + (11) = 1891
	R	116	1.05	122	1.000		122	0			0			0	122	122
	L	65	1.05	68	1.000		68	12			0		10%	4	84	68 + {12} + (4) = 84
WB	T	1644	1.05	1,726	1.000		1726	83			0		15%	6	1815	1726 + {83} + (6) = 1815
	R	76	1.05	80	1.000		80	0			0			0	80	80
	L	121	1.05	127	1.000		127	0			0			0	127	127
NB	T	48	1.05	50	1.000		50	0			0			0	50	50
	R	75	1.05	79	1.000		79	20			0	10%		5	104	79 + {20} + (5) = 104
	L	75	1.05	79	1.000		79	0			0			0	79	79
SB	T	56	1.05	59	1.000		59	0			0			0	59	59
	R	49	1.05	51	1.000		51	0			0			0	51	51

Intersection= US 192 and Narcoossee Rd / Hickory Tree Rd — 6

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	Vested	% PB Ent	% PB Ext	Passby	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	586	1.05	615	1.000		615	93			0	25%		16	724	615 + {93} + (16) = 724
EB	T	1019	1.05	1,070	1.000		1070	67			0			0	1137	1070 + {67} = 1137
	R	115	1.05	121	1.000		121	0			0			0	121	121
	L	129	1.05	135	1.000		135	14			0			0	149	135 + {14} = 149
WB	T	1315	1.05	1,381	1.000		1381	61			0			0	1442	1381 + {61} = 1442
	R	320	1.05	336	1.000		336	2			0	15%		10	348	336 + {2} + (10) = 348
	L	153	1.05	161	1.000		161	0			0			0	161	161
NB	T	464	1.05	487	1.000		487	16			0	10%		6	509	487 + {16} + (6) = 509
	R	94	1.05	99	1.000		99	23			0			0	122	99 + {23} = 122
	L	582	1.05	611	1.000		611	25			0		15%	5	641	611 + {25} + (5) = 641
SB	T	610	1.05	641	1.000		641	9			0		10%	4	654	641 + {9} + (4) = 654
	R	473	1.05	497	1.000		497	34			0		25%	10	541	497 + {34} + (10) = 541

Project No. 23093.1 Eden - St Cloud

Intersection Volumes

Period	Tgen	Enter	Exit	Pass By	Enter	Exit	SF	Legend
PM Peak		70	42		0	0	1.05	Existing + {Vested} + (Project) = Total

Intersection= US 192 and Nova Rd 7

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	Vested	% PB Ent	% PB Ext	Passby	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	392	1.05	**412**	1.000		**412**	19			**0**		10%	**3**	**434**	**412 + {19} + (3) = 434**
EB	T	1004	1.05	**1,054**	1.000		**1054**	24			**0**		5%	**2**	**1080**	**1054 + {24} + (2) = 1080**
	R	0	1.05	**0**	1.000		**0**	0			**0**			**0**	**0**	
	L	0	1.05	**0**	1.000		**0**	0			**0**			**0**	**0**	
WB	T	864	1.05	**907**	1.000		**907**	38			**0**	5%		**4**	**949**	**907 + {38} + (4) = 949**
	R	46	1.05	**48**	1.000		**48**	11			**0**			**0**	**59**	**48 + {11} = 59**
	L	0	1.05	**0**	1.000		**0**	0			**0**			**0**	**0**	
NB	T	0	1.05	**0**	1.000		**0**	0			**0**			**0**	**0**	
	R	0	1.05	**0**	1.000		**0**	0			**0**			**0**	**0**	
	L	24	1.05	**25**	1.000		**25**	6			**0**			**0**	**31**	**25 + {6} = 31**
SB	T	0	1.05	**0**	1.000		**0**	0			**0**			**0**	**0**	
	R	356	1.05	**374**	1.000		**374**	30			**0**	10%		**6**	**410**	**374 + {30} + (6) = 410**

Intersection= Narcoossee Rd and Project Access A/Terrapin Blvd 8

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	Vested	% PB Ent	% PB Ext	Passby	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	6	1.00	**6**	1.000		**6**	0			**0**			**0**	**6**	**6**
EB	T	0	1.00	**0**	1.000		**0**	0			**0**			**0**	**0**	
	R	20	1.00	**20**	1.000		**20**	0			**0**			**0**	**20**	**20**
	L	0	1.00	**0**	1.000		**0**	0			**0**		45%	**20**	**20**	**(20)**
WB	T	0	1.00	**0**	1.000		**0**	0			**0**			**0**	**0**	
	R	0	1.00	**0**	1.000		**0**	0			**0**		30%	**12**	**12**	**(12)**
	L	37	1.00	**37**	1.000		**37**	0			**0**			**0**	**37**	**37**
NB	T	1464	1.00	**1,464**	1.000		**1464**	73			**0**		10%	**4**	**1541**	**1464 + {73} + (4) = 1541**
	R	0	1.00	**0**	1.000		**0**	0			**0**	37%		**25**	**25**	**(25)**
	L	0	1.00	**0**	1.000		**0**	0			**0**	30%		**21**	**21**	**(21)**
SB	T	1963	1.00	**1,963**	1.000		**1963**	76			**0**	10%		**7**	**2046**	**1963 + {76} + (7) = 2046**
	R	15	1.00	**15**	1.000		**15**	0			**0**			**0**	**15**	**15**

Intersection= Narcoossee Rd and Project Access B/Tilapia Dr 9

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Adj Bg'd	Vested	% PB Ent	% PB Ext	Passby	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	3	1.00	**3**	1.000		**3**	0			**0**			**0**	**3**	**3**
EB	T	0	1.00	**0**	1.000		**0**	0			**0**			**0**	**0**	
	R	45	1.00	**45**	1.000		**45**	0			**0**			**0**	**45**	**45**
	L	0	1.00	**0**	1.000		**0**	0			**0**		10%	**4**	**4**	**(4)**
WB	T	0	1.00	**0**	1.000		**0**	0			**0**			**0**	**0**	
	R	0	1.00	**0**	1.000		**0**	0			**0**		10%	**4**	**4**	**(4)**
	L	77	1.00	**77**	1.000		**77**	0			**0**			**0**	**77**	**77**
NB	T	1495	1.00	**1,495**	1.000		**1495**	73			**0**	37%		**25**	**1593**	**1495 + {73} + (25) = 1593**
	R	0	1.00	**0**	1.000		**0**	0			**0**	18%		**13**	**13**	**(13)**
	L	0	1.00	**0**	1.000		**0**	0			**0**	10%		**7**	**7**	**(7)**
SB	T	1965	1.00	**1,965**	1.000		**1965**	76			**0**		45%	**20**	**2061**	**1965 + {76} + (20) = 2061**
	R	19	1.00	**19**	1.000		**19**	0			**0**			**0**	**19**	**19**

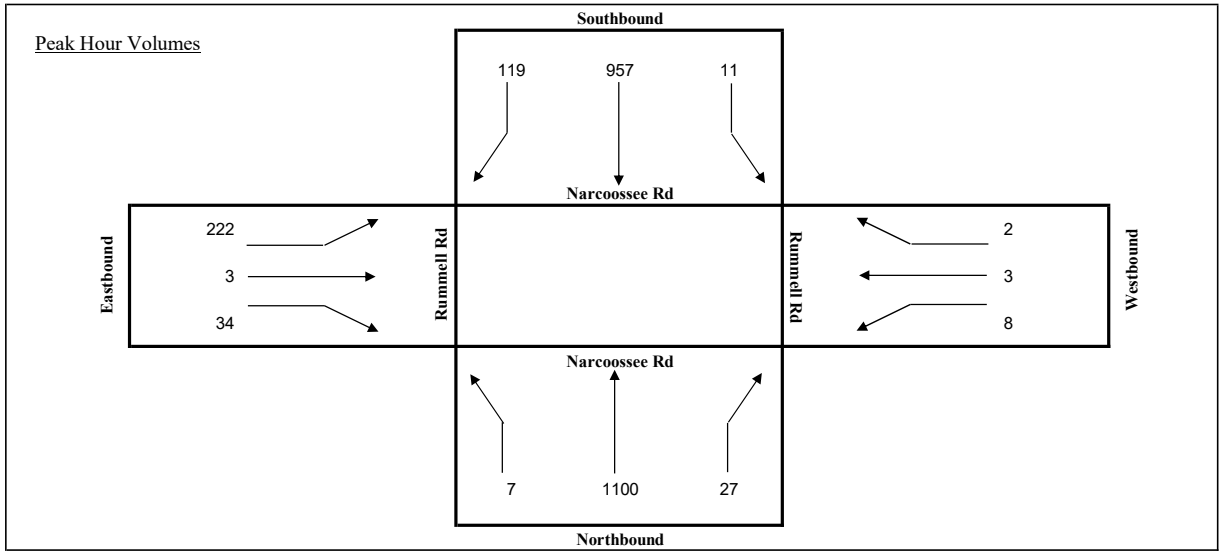
Appendix H
Turning Movement Counts & Seasonal Factor Data

TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

Intersection (N/S): Narcoossee Rd
Intersection (E/W): Rummell Rd
Date: 1/10/2024

			Narcoossee Rd			Narcoossee Rd			Rummell Rd			Rummell Rd			
			NB			SB			EB			WB			
	Start	End	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
	7:00 AM	7:15 AM	2	257	6	0	188	23	46	0	6	0	1	1	530
	7:15 AM	7:30 AM	1	289	1	1	222	23	58	0	10	0	0	1	606
	7:30 AM	7:45 AM	2	290	6	2	235	27	60	1	11	1	0	0	635
	7:45 AM	8:00 AM	2	272	10	4	242	33	54	2	5	3	3	0	630
	8:00 AM	8:15 AM	2	249	10	4	258	36	50	0	8	4	0	1	622
	8:15 AM	8:30 AM	5	245	11	5	226	32	56	1	4	1	4	3	593
	8:30 AM	8:45 AM	1	232	8	9	212	30	49	1	3	7	4	1	557
	8:45 AM	9:00 AM	6	237	9	6	213	24	50	0	3	5	3	1	557
Total for:	7:00 AM	8:00 AM	7	1108	23	7	887	106	218	3	32	4	4	2	2401
Total for:	8:00 AM	9:00 AM	14	963	38	24	909	122	205	2	18	17	11	6	2329
Tota Peak Hour:	7:15 AM	8:15 AM	7	1100	27	11	957	119	222	3	34	8	3	2	2493
Overall PHF:	0.98														

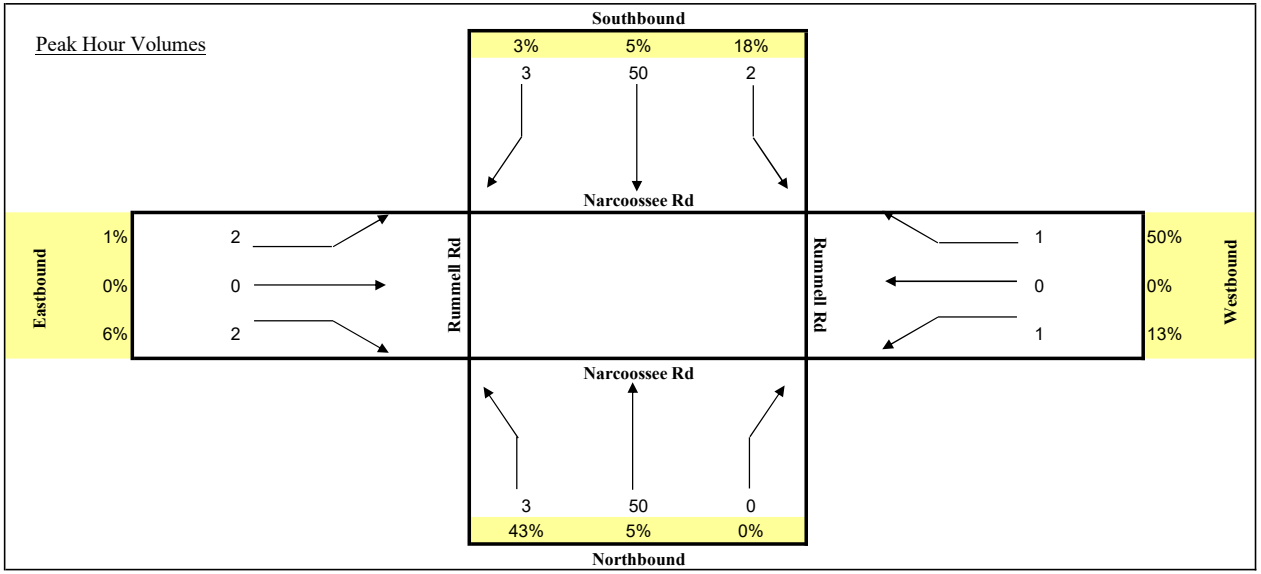


TURNING MOVEMENT COUNT ANALYSIS

TRUCKS

Intersection (N/S): Narcoossee Rd
Intersection (E/W): Rummell Rd
Date: 1/10/2024

			Narcoossee Rd			Narcoossee Rd			Rummell Rd			Rummell Rd			
			NB			SB			EB			WB			
	Start	End	R	T	L	R	T	L	R	T	L	R	T	L	TOTAL
	7:00 AM	7:15 AM	2	10	1	0	8	3	2	0	1	0	0	0	27
	7:15 AM	7:30 AM	1	9	0	0	11	1	1	0	1	0	0	0	24
	7:30 AM	7:45 AM	0	13	0	0	10	1	0	0	0	0	0	0	24
	7:45 AM	8:00 AM	1	10	0	0	5	0	0	0	0	0	0	0	16
	8:00 AM	8:15 AM	2	9	0	0	13	1	1	0	1	0	0	1	28
	8:15 AM	8:30 AM	0	12	0	1	10	0	0	0	1	0	0	0	24
	8:30 AM	8:45 AM	0	13	0	0	15	2	1	0	0	1	0	0	32
	8:45 AM	9:00 AM	1	16	0	1	12	0	0	0	0	0	0	0	30
Total for:	7:00 AM	8:00 AM	4	42	1	0	34	5	3	0	2	0	0	0	91
Total for:	8:00 AM	9:00 AM	3	50	0	2	50	3	2	0	2	1	0	1	114
Tota Peak Hour:	8:00 AM	9:00 AM	3	50	0	2	50	3	2	0	2	1	0	1	114
Overall PHF:	0.89														

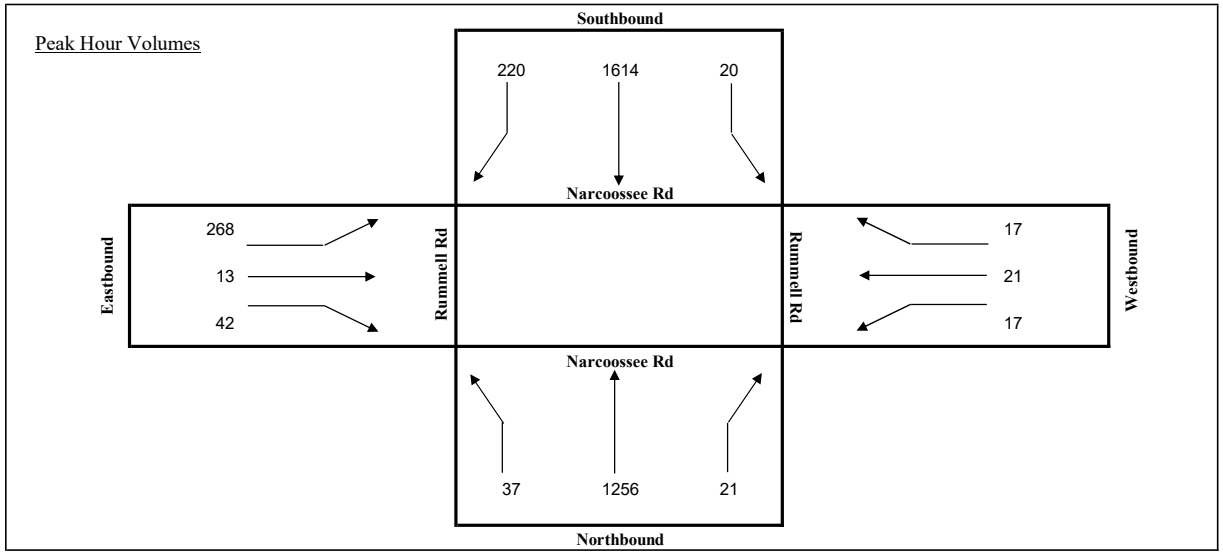


TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

Intersection (N/S): Narcoossee Rd
Intersection (E/W): Rummell Rd
Date: 1/10/2024

		Narcoossee Rd			Narcoossee Rd			Rummell Rd			Rummell Rd			
		NB			SB			EB			WB			
Start	End	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
4:00 PM	4:15 PM	7	205	0	6	325	43	38	2	7	2	2	5	642
4:15 PM	4:30 PM	8	231	1	2	365	46	49	1	11	1	6	5	726
4:30 PM	4:45 PM	7	255	2	4	382	63	50	1	12	6	2	2	786
4:45 PM	5:00 PM	10	309	5	7	392	68	55	3	10	1	4	7	871
5:00 PM	5:15 PM	8	295	5	9	412	61	61	5	10	4	4	2	876
5:15 PM	5:30 PM	11	315	6	2	400	58	66	2	14	7	7	7	895
5:30 PM	5:45 PM	8	326	2	5	408	48	72	4	8	4	2	5	892
5:45 PM	6:00 PM	10	320	8	4	394	53	69	2	10	2	8	3	883
Total for:	4:00 PM	5:00 PM	32	1000	8	19	1464	220	192	7	40	10	14	19	3025
Total for:	5:00 PM	6:00 PM	37	1256	21	20	1614	220	268	13	42	17	21	17	3546
Tota Peak Hour:	5:00 PM	6:00 PM	37	1256	21	20	1614	220	268	13	42	17	21	17	3546
Overall PHF:	0.99														

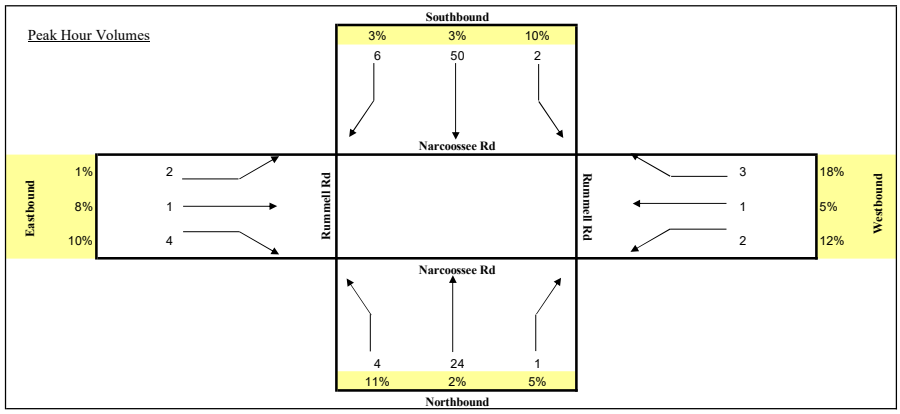


TURNING MOVEMENT COUNT ANALYSIS

TRUCKS

Intersection (N/S): Narcoossee Rd
Intersection (E/W): Rummell Rd
Date: 1/10/2024

		Narcoossee Rd			Narcoossee Rd			Rummell Rd			Rummell Rd			
		NB			SB			EB			WB			
Start	End	R	T	L	R	T	L	R	T	L	R	T	L	TOTAL
4:00 PM	4:15 PM	0	6	0	1	12	3	1	0	0	0	1	2	26
4:15 PM	4:30 PM	3	7	0	0	10	1	1	1	3	1	0	0	27
4:30 PM	4:45 PM	1	5	1	0	13	0	0	0	1	1	0	0	22
4:45 PM	5:00 PM	0	6	0	1	15	2	0	0	0	0	0	1	25
5:00 PM	5:15 PM	1	6	0	0	10	1	2	0	1	0	0	0	21
5:15 PM	5:30 PM	0	2	0	0	5	1	0	0	1	0	0	0	9
5:30 PM	5:45 PM	0	1	0	0	7	0	0	0	0	1	0	0	9
5:45 PM	6:00 PM	1	2	0	1	6	1	1	0	0	0	0	0	12
Total for:	4:00 PM	5:00 PM	4	24	1	2	50	6	2	1	4	2	1	3	100
Total for:	5:00 PM	6:00 PM	2	11	0	1	28	3	3	0	2	1	0	0	51
Tota Peak Hour:	4:00 PM	5:00 PM	4	24	1	2	50	6	2	1	4	2	1	3	100
Overall PHF:	0.93														

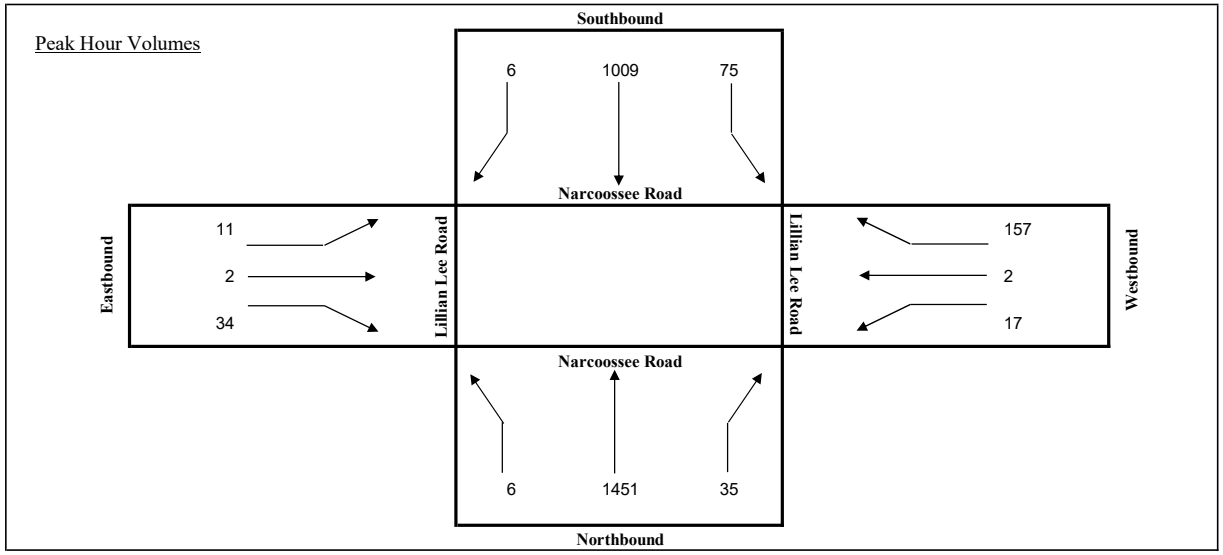


TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

Intersection (N/S): Narcoossee Road
Intersection (E/W): Lillian Lee Road
Date: 1/10/2024

			Narcoossee Road			Narcoossee Road			Lillian Lee Road			Lillian Lee Road			
			NB			SB			EB			WB			
Start	End	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 AM	7:15 AM	1	359	8	15	205	2	2	0	8	6	1	34	641
7:15 AM	7:30 AM	1	406	5	10	221	2	3	0	6	3	1	41	699
7:30 AM	7:45 AM	1	343	9	15	246	0	2	0	11	5	0	36	668
7:45 AM	8:00 AM	1	373	10	22	268	3	2	0	12	3	0	42	736
8:00 AM	8:15 AM	3	329	11	28	274	1	4	2	5	6	1	38	702
8:15 AM	8:30 AM	1	305	6	22	257	1	4	1	7	6	0	25	635
8:30 AM	8:45 AM	1	321	7	18	240	3	0	1	7	3	0	31	632
8:45 AM	9:00 AM	2	299	8	15	250	0	2	1	4	6	1	22	610
Total for:	7:00 AM	8:00 AM	4	1481	32	62	940	7	9	0	37	17	2	153	2744
Total for:	8:00 AM	9:00 AM	7	1254	32	83	1021	5	10	5	23	21	2	116	2579
Tota Peak Hour:	7:15 AM	8:15 AM	6	1451	35	75	1009	6	11	2	34	17	2	157	2805
Overall PHF:	0.95														

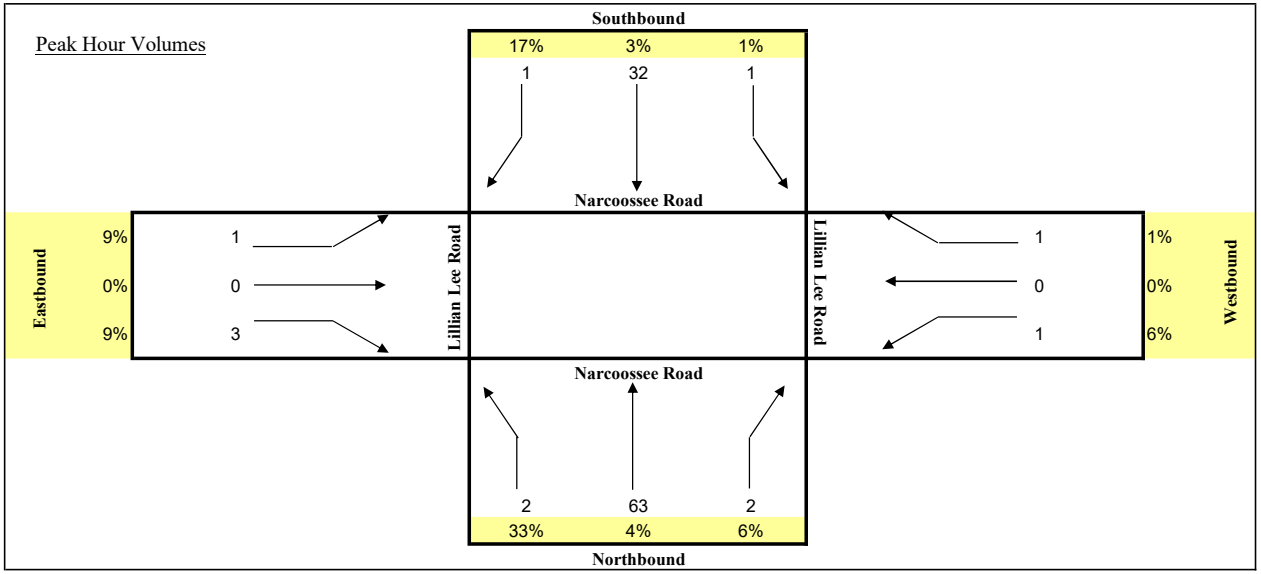


TURNING MOVEMENT COUNT ANALYSIS

TRUCKS

Intersection (N/S): Narcoossee Road
Intersection (E/W): Lillian Lee Road
Date: 1/10/2024

		Narcoossee Road			Narcoossee Road			Lillian Lee Road			Lillian Lee Road			
		NB			SB			EB			WB			
Start	End	R	T	L	R	T	L	R	T	L	R	T	L	TOTAL
7:00 AM	7:15 AM	0	15	2	1	6	0	0	0	0	0	0	1	25
7:15 AM	7:30 AM	1	20	0	0	8	1	0	0	0	0	0	0	30
7:30 AM	7:45 AM	1	14	1	0	6	0	0	0	2	0	0	0	24
7:45 AM	8:00 AM	0	13	0	0	10	0	1	0	1	1	0	1	27
8:00 AM	8:15 AM	0	16	1	1	8	0	0	0	0	0	0	0	26
8:15 AM	8:30 AM	0	10	0	1	12	0	0	0	0	0	0	0	23
8:30 AM	8:45 AM	1	11	0	0	13	1	0	0	1	0	0	1	28
8:45 AM	9:00 AM	0	13	0	0	10	0	0	0	1	1	0	1	26
Total for:	7:00 AM	8:00 AM	2	62	3	1	30	1	1	0	3	1	0	2	106
Total for:	8:00 AM	9:00 AM	1	50	1	2	43	1	0	0	2	1	0	2	103
Tota Peak Hour:	7:15 AM	8:15 AM	2	63	2	1	32	1	1	0	3	1	0	1	107
Overall PHF:	0.89														

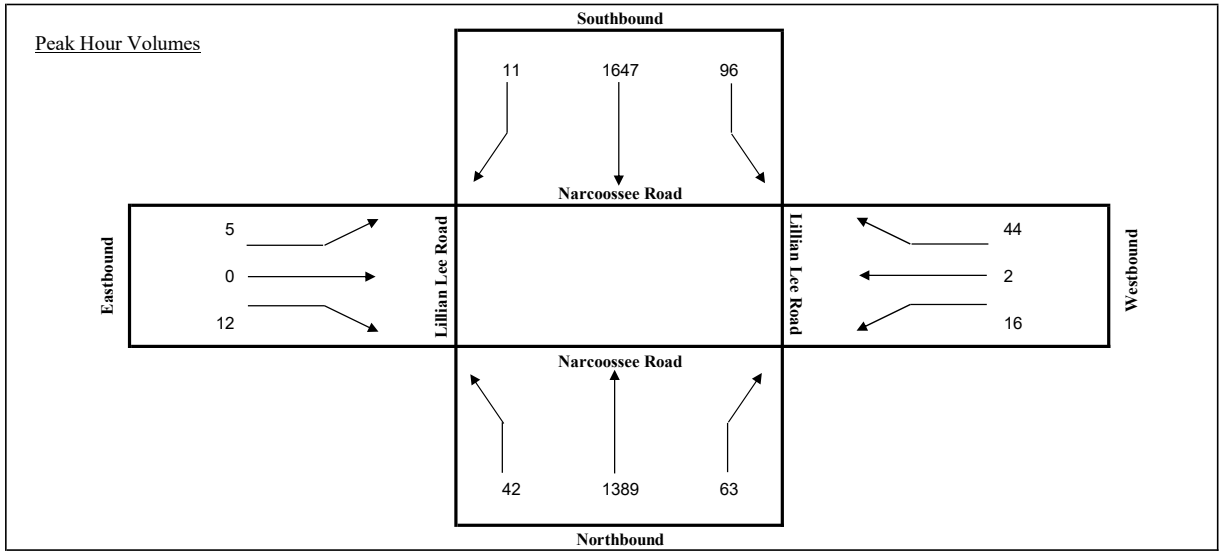


TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

Intersection (N/S): Narcoossee Road
Intersection (E/W): Lillian Lee Road
Date: 1/10/2024

			Narcoossee Road			Narcoossee Road			Lillian Lee Road			Lillian Lee Road			
			NB			SB			EB			WB			
	Start	End	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
	4:00 PM	4:15 PM	12	254	19	29	339	4	0	0	5	2	1	12	677
	4:15 PM	4:30 PM	10	295	22	33	367	0	2	1	5	7	0	19	761
	4:30 PM	4:45 PM	9	317	15	31	393	1	1	1	6	2	0	13	789
	4:45 PM	5:00 PM	13	367	13	28	418	2	1	0	3	7	1	12	865
	5:00 PM	5:15 PM	10	369	21	25	405	4	0	0	2	4	0	10	850
	5:15 PM	5:30 PM	9	324	18	19	408	4	3	0	2	3	0	10	800
	5:30 PM	5:45 PM	10	329	11	24	416	1	1	0	5	2	1	12	812
	5:45 PM	6:00 PM	9	313	18	20	398	6	0	1	3	4	0	12	784
Total for:	4:00 PM	5:00 PM	44	1233	69	121	1517	7	4	2	19	18	2	56	3092
Total for:	5:00 PM	6:00 PM	38	1335	68	88	1627	15	4	1	12	13	1	44	3246
Tota Peak Hour:	4:45 PM	5:45 PM	42	1389	63	96	1647	11	5	0	12	16	2	44	3327
Overall PHF:	0.96														

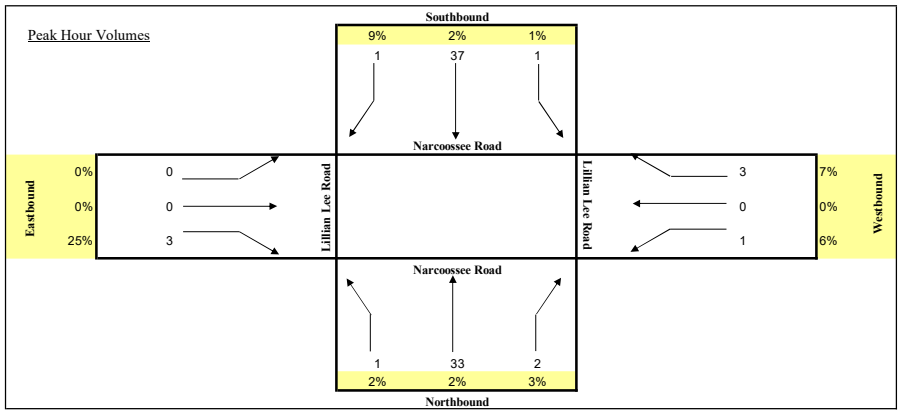


TURNING MOVEMENT COUNT ANALYSIS

TRUCKS

Intersection (N/S): Narcoossee Road
Intersection (E/W): Lillian Lee Road
Date: 1/10/2024

		Narcoossee Road			Narcoossee Road			Lillian Lee Road			Lillian Lee Road			
		NB			SB			EB			WB			
Start	End	R	T	L	R	T	L	R	T	L	R	T	L	TOTAL
4:00 PM	4:15 PM	1	10	2	1	10	1	0	0	0	0	0	0	25
4:15 PM	4:30 PM	0	10	0	0	12	0	0	0	2	1	0	2	27
4:30 PM	4:45 PM	0	5	0	0	7	0	0	0	0	0	0	0	12
4:45 PM	5:00 PM	0	8	0	0	8	0	0	0	1	0	0	1	18
5:00 PM	5:15 PM	0	6	1	1	6	0	0	0	0	0	0	0	14
5:15 PM	5:30 PM	1	3	1	0	3	0	0	0	0	0	0	1	9
5:30 PM	5:45 PM	0	3	0	0	3	0	0	0	1	0	0	0	7
5:45 PM	6:00 PM	0	2	0	0	4	0	0	0	0	0	0	0	6
Total for:	4:00 PM	5:00 PM	1	33	2	1	37	1	0	0	3	1	0	3	82
Total for:	5:00 PM	6:00 PM	1	14	2	1	16	0	0	0	1	0	0	1	36
Tota Peak Hour:	4:00 PM	5:00 PM	1	33	2	1	37	1	0	0	3	1	0	3	82
Overall PHF:	0.76														

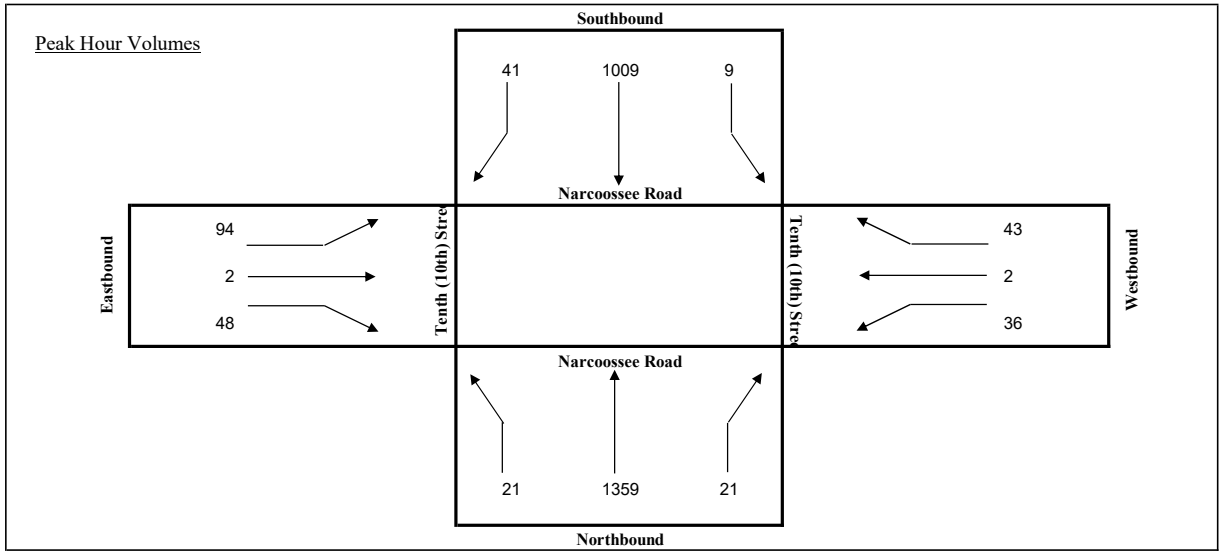


TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

Intersection (N/S): Narcoossee Road
Intersection (E/W): Tenth (10th) Street
Date: 1/10/2024

			Narcoossee Road			Narcoossee Road			Tenth (10th) Street			Tenth (10th) Street			
			NB			SB			EB			WB			
	Start	End	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
	7:00 AM	7:15 AM	5	345	4	1	211	9	18	1	8	7	1	6	616
	7:15 AM	7:30 AM	0	380	6	3	222	6	24	0	11	11	0	10	673
	7:30 AM	7:45 AM	7	319	2	1	248	11	21	0	11	6	0	13	639
	7:45 AM	8:00 AM	5	351	6	3	271	10	24	2	14	10	1	10	707
	8:00 AM	8:15 AM	9	309	7	2	268	14	25	0	12	9	1	10	666
	8:15 AM	8:30 AM	8	282	3	5	254	10	25	0	7	5	0	7	606
	8:30 AM	8:45 AM	12	306	7	0	234	15	22	0	3	8	1	6	614
	8:45 AM	9:00 AM	8	288	3	1	241	18	15	1	9	5	0	8	597
Total for:	7:00 AM	8:00 AM	17	1395	18	8	952	36	87	3	44	34	2	39	2635
Total for:	8:00 AM	9:00 AM	37	1185	20	8	997	57	87	1	31	27	2	31	2483
Tota Peak Hour:	7:15 AM	8:15 AM	21	1359	21	9	1009	41	94	2	48	36	2	43	2685
Overall PHF:	0.95														

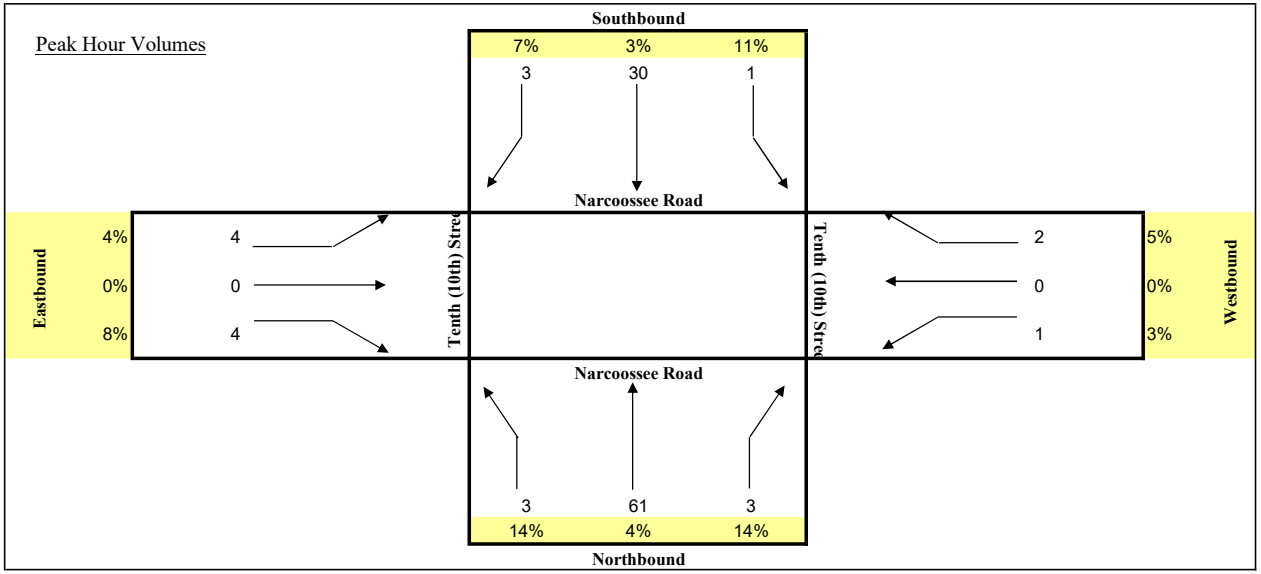


TURNING MOVEMENT COUNT ANALYSIS

TRUCKS

Intersection (N/S): Narcoossee Road
Intersection (E/W): Tenth (10th) Street
Date: 1/10/2024

			Narcoossee Road			Narcoossee Road			Tenth (10th) Street			Tenth (10th) Street			
			NB			SB			EB			WB			
	Start	End	R	T	L	R	T	L	R	T	L	R	T	L	TOTAL
	7:00 AM	7:15 AM	2	17	1	1	3	2	0	0	0	0	0	0	26
	7:15 AM	7:30 AM	0	18	0	0	7	1	2	0	2	1	0	1	32
	7:30 AM	7:45 AM	1	14	1	0	8	0	1	0	0	0	0	1	26
	7:45 AM	8:00 AM	0	12	1	0	12	0	1	0	2	0	0	0	28
	8:00 AM	8:15 AM	0	17	0	1	6	1	0	0	0	0	0	0	25
	8:15 AM	8:30 AM	1	10	0	1	11	0	0	0	0	0	0	0	23
	8:30 AM	8:45 AM	1	10	1	0	14	0	1	0	0	1	0	1	29
	8:45 AM	9:00 AM	0	13	0	0	11	1	0	0	1	1	0	0	27
Total for:	7:00 AM	8:00 AM	3	61	3	1	30	3	4	0	4	1	0	2	112
Total for:	8:00 AM	9:00 AM	2	50	1	2	42	2	1	0	1	2	0	1	104
Tota Peak Hour:	7:00 AM	8:00 AM	3	61	3	1	30	3	4	0	4	1	0	2	112
Overall PHF:	0.88														

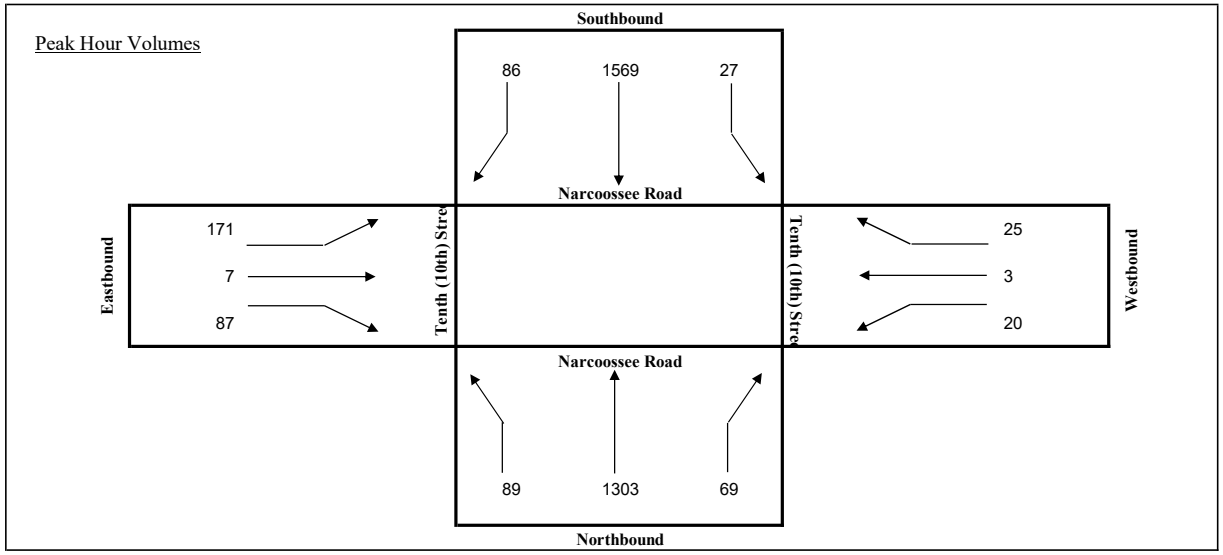


TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

Intersection (N/S): Narcoossee Road
Intersection (E/W): Tenth (10th) Street
Date: 1/10/2024

			Narcoossee Road			Narcoossee Road			Tenth (10th) Street			Tenth (10th) Street			
			NB			SB			EB			WB			
	Start	End	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
	4:00 PM	4:15 PM	24	260	6	9	327	12	24	4	14	5	1	3	689
	4:15 PM	4:30 PM	22	291	12	6	362	12	31	1	13	6	1	6	763
	4:30 PM	4:45 PM	25	305	7	3	379	20	35	0	20	8	2	3	807
	4:45 PM	5:00 PM	25	342	13	10	399	22	44	0	18	8	2	6	889
	5:00 PM	5:15 PM	20	348	17	5	383	24	47	4	23	3	0	6	880
	5:15 PM	5:30 PM	24	304	20	4	385	22	42	1	21	5	0	8	836
	5:30 PM	5:45 PM	20	309	19	8	402	18	38	2	25	4	1	5	851
	5:45 PM	6:00 PM	21	300	16	8	375	23	31	2	21	4	0	6	807
Total for:	4:00 PM	5:00 PM	96	1198	38	28	1467	66	134	5	65	27	6	18	3148
Total for:	5:00 PM	6:00 PM	85	1261	72	25	1545	87	158	9	90	16	1	25	3374
Tota Peak Hour:	4:45 PM	5:45 PM	89	1303	69	27	1569	86	171	7	87	20	3	25	3456
Overall PHF:	0.97														

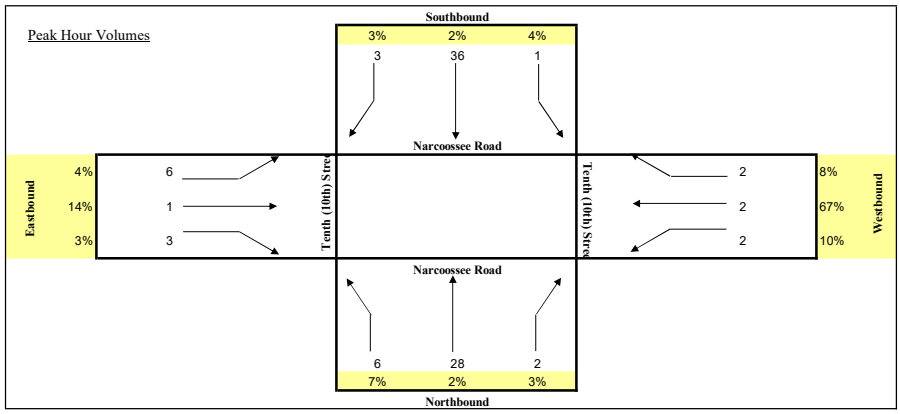


TURNING MOVEMENT COUNT ANALYSIS

TRUCKS

Intersection (N/S): Narcoossee Road
Intersection (E/W): Tenth (10th) Street
Date: 1/10/2024

		Narcoossee Road			Narcoossee Road			Tenth (10th) Street			Tenth (10th) Street			
		NB			SB			EB			WB			
Start	End	R	T	L	R	T	L	R	T	L	R	T	L	TOTAL
4:00 PM	4:15 PM	3	10	1	1	9	0	3	1	2	1	1	0	32
4:15 PM	4:30 PM	0	8	1	0	12	2	1	0	1	1	0	1	27
4:30 PM	4:45 PM	1	4	0	0	6	1	0	0	0	0	0	1	13
4:45 PM	5:00 PM	2	6	0	0	9	0	2	0	0	0	1	0	20
5:00 PM	5:15 PM	0	6	1	0	6	0	1	1	0	0	0	0	15
5:15 PM	5:30 PM	0	4	0	0	2	1	0	0	1	0	0	1	9
5:30 PM	5:45 PM	1	3	1	1	3	0	0	0	1	0	0	0	10
5:45 PM	6:00 PM	0	1	0	0	4	0	1	1	0	0	0	0	7
Total for:	4:00 PM	5:00 PM	6	28	2	1	36	3	6	1	3	2	2	2	92
Total for:	5:00 PM	6:00 PM	1	14	2	1	15	1	2	2	2	0	0	1	41
Tota Peak Hour:	4:00 PM	5:00 PM	6	28	2	1	36	3	6	1	3	2	2	2	92
Overall PHF:	0.72														

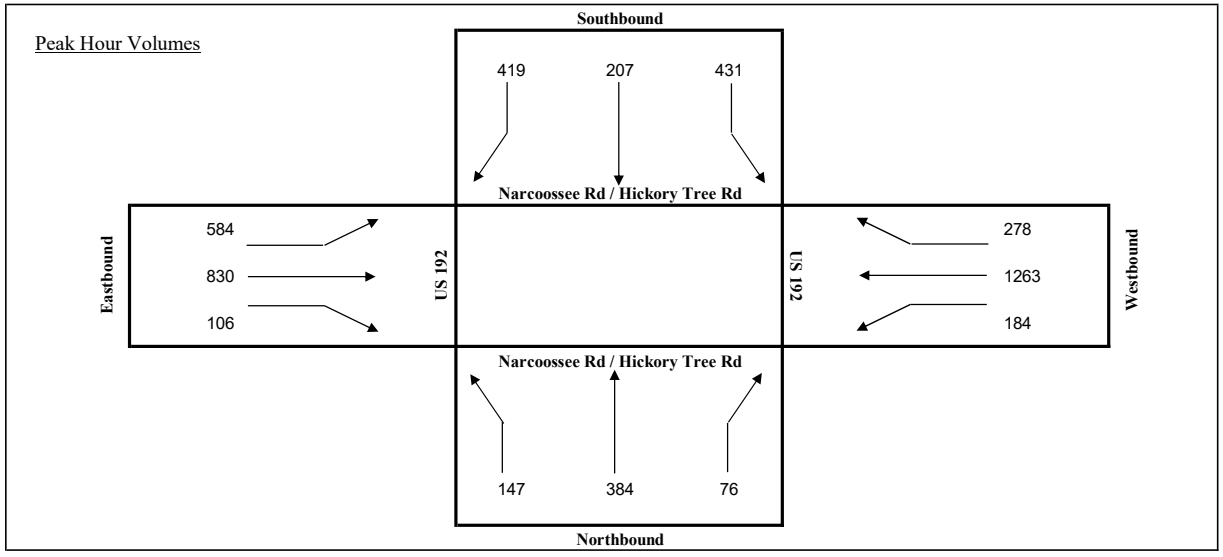


TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

Intersection (N/S): Narcoossee Rd / Hickory Tree Rd
Intersection (E/W): US 192
Date: 1/10/2024

			Narcoossee Rd / Hickory Tree Rd			Narcoossee Rd / Hickory Tree Rd			US 192			US 192			
			NB			SB			EB			WB			
	Start	End	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
	7:00 AM	7:15 AM	26	138	3	90	46	88	136	135	7	25	208	65	967
	7:15 AM	7:30 AM	34	142	13	99	46	95	151	151	13	32	240	80	1096
	7:30 AM	7:45 AM	32	96	16	102	57	97	151	168	17	42	268	63	1109
	7:45 AM	8:00 AM	35	116	19	116	48	109	151	195	22	46	323	78	1258
	8:00 AM	8:15 AM	35	89	22	109	68	106	154	220	28	54	312	69	1266
	8:15 AM	8:30 AM	37	72	18	112	51	99	143	204	31	43	326	62	1198
	8:30 AM	8:45 AM	40	107	17	94	40	105	136	211	25	41	302	69	1187
	8:45 AM	9:00 AM	42	95	19	102	47	69	138	204	23	31	288	53	1111
Total for:	7:00 AM	8:00 AM	127	492	51	407	197	389	589	649	59	145	1039	286	4430
Total for:	8:00 AM	9:00 AM	154	363	76	417	206	379	571	839	107	169	1228	253	4762
Tota Peak Hour:	7:45 AM	8:45 AM	147	384	76	431	207	419	584	830	106	184	1263	278	4909
Overall PHF:	0.97														

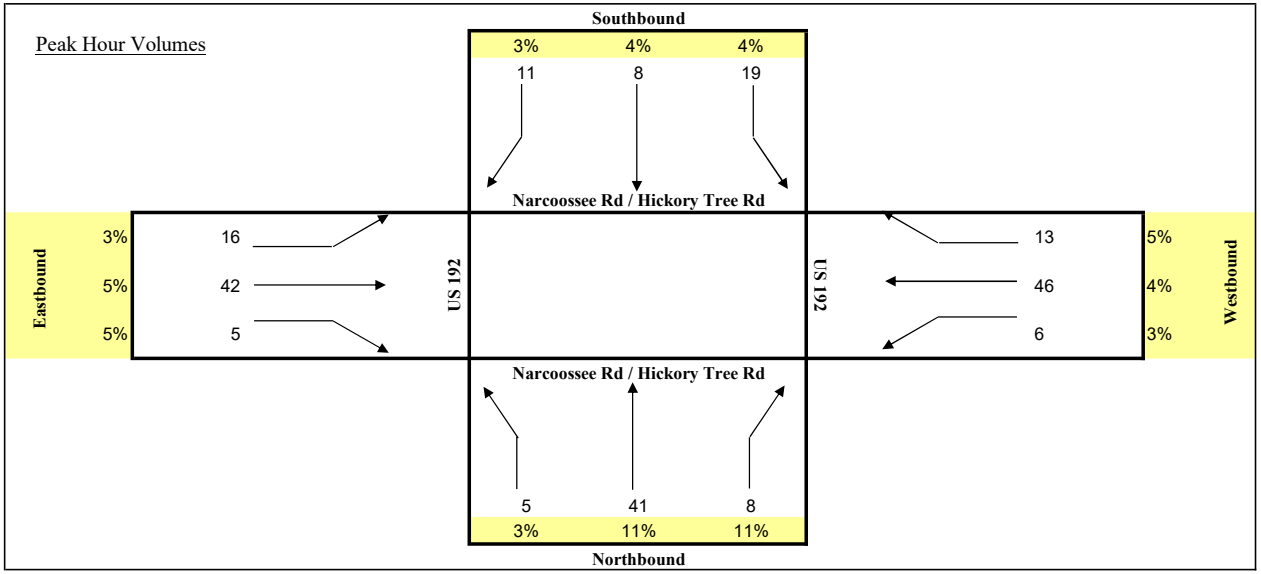


TURNING MOVEMENT COUNT ANALYSIS

TRUCKS

Intersection (N/S): Narcoossee Rd / Hickory Tree Rd
Intersection (E/W): US 192
Date: 1/10/2024

		Narcoossee Rd / Hickory Tree Rd			Narcoossee Rd / Hickory Tree Rd			US 192			US 192			
		NB			SB			EB			WB			
Start	End	R	T	L	R	T	L	R	T	L	R	T	L	TOTAL
7:00 AM	7:15 AM	0	9	0	2	0	1	3	15	0	0	10	3	43
7:15 AM	7:30 AM	2	11	4	5	1	4	4	10	1	1	8	3	54
7:30 AM	7:45 AM	1	10	1	2	5	1	5	12	2	0	10	2	51
7:45 AM	8:00 AM	0	8	1	7	2	5	3	9	0	2	13	4	54
8:00 AM	8:15 AM	2	12	2	5	0	1	4	11	2	3	15	4	61
8:15 AM	8:30 AM	1	7	2	4	3	4	4	8	1	4	10	2	50
8:30 AM	8:45 AM	1	10	2	4	4	6	3	9	1	1	9	3	53
8:45 AM	9:00 AM	0	9	2	6	3	2	2	6	1	2	11	2	46
Total for:	7:00 AM	8:00 AM	3	38	6	16	8	11	15	46	3	3	41	12	202
Total for:	8:00 AM	9:00 AM	4	38	8	19	10	13	13	34	5	10	45	11	210
Tota Peak Hour:	7:15 AM	8:15 AM	5	41	8	19	8	11	16	42	5	6	46	13	220
Overall PHF:	0.90														

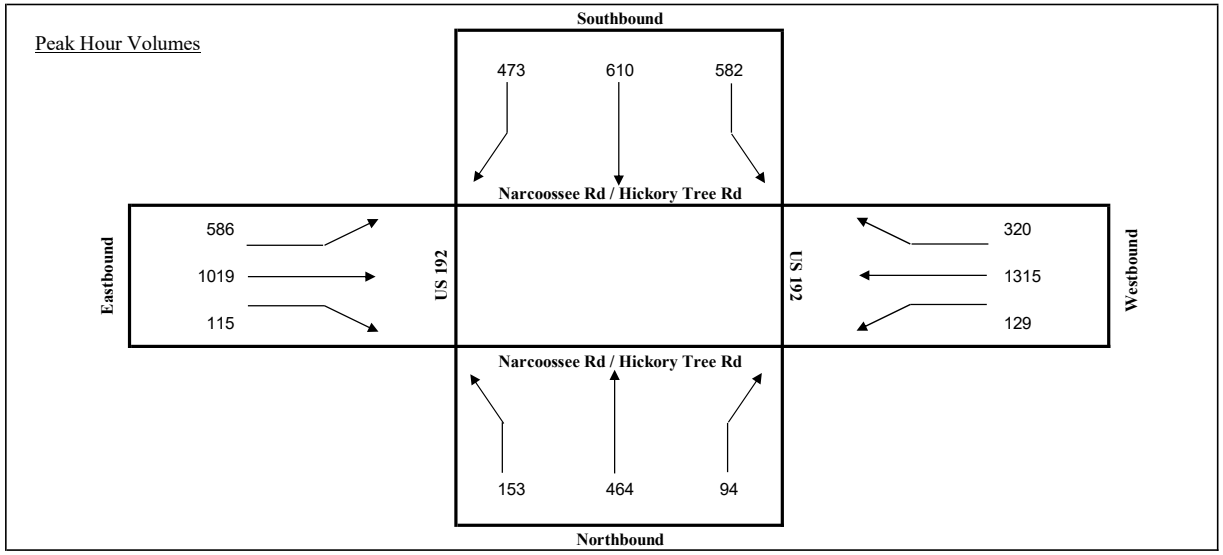


TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

Intersection (N/S): Narcoossee Rd / Hickory Tree Rd
Intersection (E/W): US 192
Date: 1/10/2024

			Narcoossee Rd / Hickory Tree Rd			Narcoossee Rd / Hickory Tree Rd			US 192			US 192			
			NB			SB			EB			WB			
	Start	End	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
	4:00 PM	4:15 PM	37	88	22	143	90	109	117	204	19	16	218	83	1146
	4:15 PM	4:30 PM	44	93	19	137	133	109	134	213	24	22	256	85	1269
	4:30 PM	4:45 PM	37	94	20	145	146	116	153	243	21	30	321	79	1405
	4:45 PM	5:00 PM	45	117	22	156	161	107	151	261	31	33	303	86	1473
	5:00 PM	5:15 PM	36	136	27	141	150	116	139	242	24	34	340	75	1460
	5:15 PM	5:30 PM	32	112	21	144	146	120	143	253	29	28	342	81	1451
	5:30 PM	5:45 PM	40	99	24	141	153	130	153	263	31	34	330	78	1476
	5:45 PM	6:00 PM	36	70	23	138	148	112	141	248	27	36	300	67	1346
Total for:	4:00 PM	5:00 PM	163	392	83	581	530	441	555	921	95	101	1098	333	5293
Total for:	5:00 PM	6:00 PM	144	417	95	564	597	478	576	1006	111	132	1312	301	5733
Tota Peak Hour:	4:45 PM	5:45 PM	153	464	94	582	610	473	586	1019	115	129	1315	320	5860
Overall PHF:	0.99														

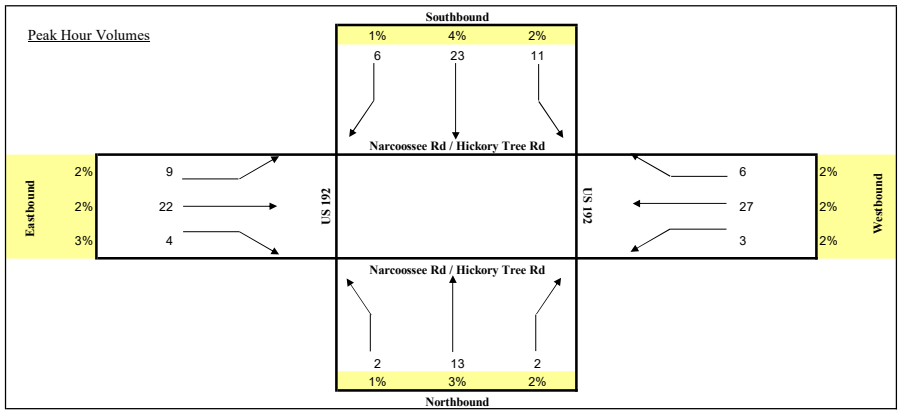


TURNING MOVEMENT COUNT ANALYSIS

TRUCKS

Intersection (N/S): Narcoossee Rd / Hickory Tree Rd
Intersection (E/W): US 192
Date: 1/10/2024

		Narcoossee Rd / Hickory Tree Rd			Narcoossee Rd / Hickory Tree Rd			US 192			US 192			
		NB			SB			EB			WB			
Start	End	R	T	L	R	T	L	R	T	L	R	T	L	TOTAL
4:00 PM	4:15 PM	1	4	1	3	6	1	5	5	0	1	7	3	37
4:15 PM	4:30 PM	0	3	1	2	10	2	1	6	2	0	6	1	34
4:30 PM	4:45 PM	1	2	0	2	2	2	1	7	1	0	9	2	29
4:45 PM	5:00 PM	0	4	0	4	5	1	2	4	1	2	5	0	28
5:00 PM	5:15 PM	0	2	1	2	3	1	1	3	0	1	7	1	22
5:15 PM	5:30 PM	1	3	0	3	0	0	0	6	1	0	3	1	18
5:30 PM	5:45 PM	0	2	0	2	0	2	1	2	0	1	6	0	16
5:45 PM	6:00 PM	1	0	0	0	1	1	0	1	0	0	3	1	8
Total for:	4:00 PM	5:00 PM	2	13	2	11	23	6	9	22	4	3	27	6	128
Total for:	5:00 PM	6:00 PM	2	7	1	7	4	4	2	12	1	2	19	3	64
Tota Peak Hour:	4:00 PM	5:00 PM	2	13	2	11	23	6	9	22	4	3	27	6	128
Overall PHF:	0.86														

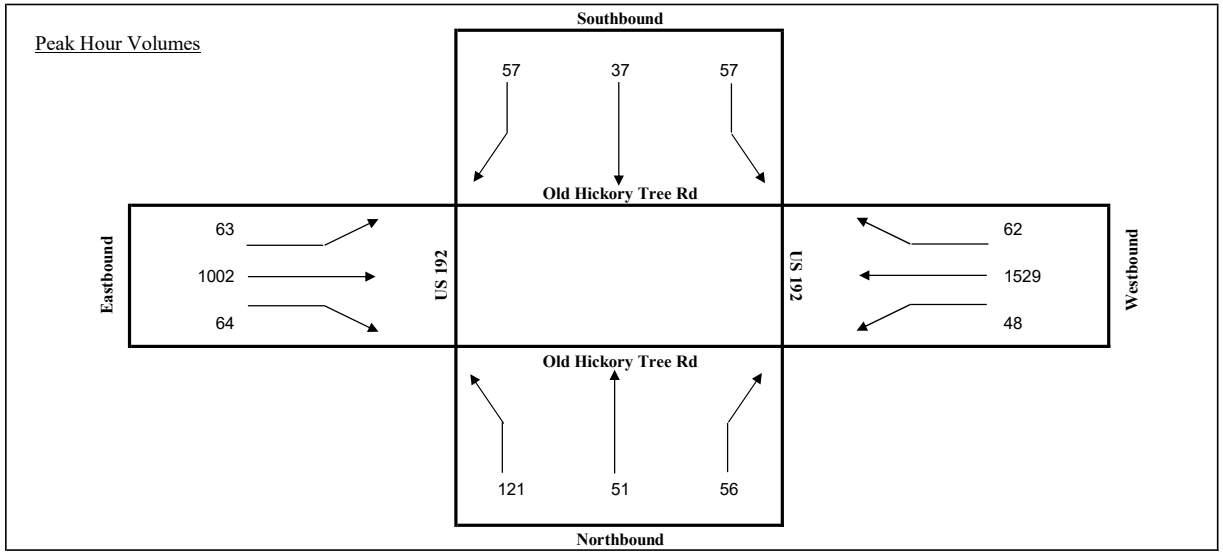


TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

Intersection (N/S): Old Hickory Tree Rd
Intersection (E/W): US 192
Date: 1/10/2024

			Old Hickory Tree Rd			Old Hickory Tree Rd			US 192			US 192			
			NB			SB			EB			WB			
	Start	End	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
	7:00 AM	7:15 AM	18	10	11	10	5	8	8	222	10	10	332	12	656
	7:15 AM	7:30 AM	24	12	12	16	10	12	14	245	14	11	354	9	733
	7:30 AM	7:45 AM	27	11	13	13	7	17	11	230	15	14	374	13	745
	7:45 AM	8:00 AM	31	15	15	18	10	16	15	244	12	10	390	17	793
	8:00 AM	8:15 AM	29	14	13	14	12	13	17	262	17	15	382	16	804
	8:15 AM	8:30 AM	34	11	15	12	8	11	20	266	20	9	383	16	805
	8:30 AM	8:45 AM	29	10	14	16	6	9	11	249	17	11	336	10	718
	8:45 AM	9:00 AM	24	9	11	11	9	9	11	248	17	10	308	14	681
Total for:	7:00 AM	8:00 AM	100	48	51	57	32	53	48	941	51	45	1450	51	2927
Total for:	8:00 AM	9:00 AM	116	44	53	53	35	42	59	1025	71	45	1409	56	3008
Tota Peak Hour:	7:30 AM	8:30 AM	121	51	56	57	37	57	63	1002	64	48	1529	62	3147
Overall PHF:	0.98														

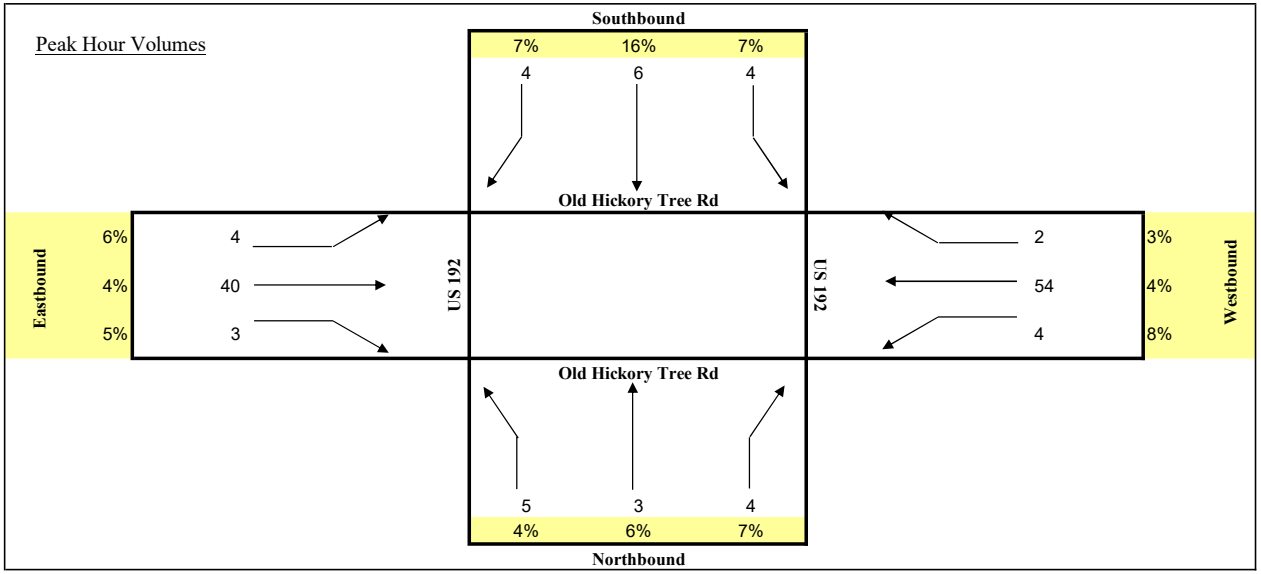


TURNING MOVEMENT COUNT ANALYSIS

TRUCKS

Intersection (N/S): Old Hickory Tree Rd
Intersection (E/W): US 192
Date: 1/10/2024

			Old Hickory Tree Rd			Old Hickory Tree Rd			US 192			US 192			
			NB			SB			EB			WB			
	Start	End	R	T	L	R	T	L	R	T	L	R	T	L	TOTAL
	7:00 AM	7:15 AM	0	0	1	0	0	0	0	9	1	2	11	2	26
	7:15 AM	7:30 AM	3	0	3	2	3	1	2	10	1	2	15	1	43
	7:30 AM	7:45 AM	1	2	0	1	1	3	1	10	0	1	12	0	32
	7:45 AM	8:00 AM	0	0	0	0	1	0	0	7	2	0	10	0	20
	8:00 AM	8:15 AM	1	1	1	1	1	0	1	13	0	1	17	1	38
	8:15 AM	8:30 AM	1	0	1	2	0	0	0	9	0	1	13	1	28
	8:30 AM	8:45 AM	0	0	0	1	2	1	0	5	1	0	8	0	18
	8:45 AM	9:00 AM	0	1	1	0	0	1	2	9	1	1	12	1	29
Total for:	7:00 AM	8:00 AM	4	2	4	3	5	4	3	36	4	5	48	3	121
Total for:	8:00 AM	9:00 AM	2	2	3	4	3	2	3	36	2	3	50	3	113
Tota Peak Hour:	7:15 AM	8:15 AM	5	3	4	4	6	4	4	40	3	4	54	2	133
Overall PHF:	0.77														

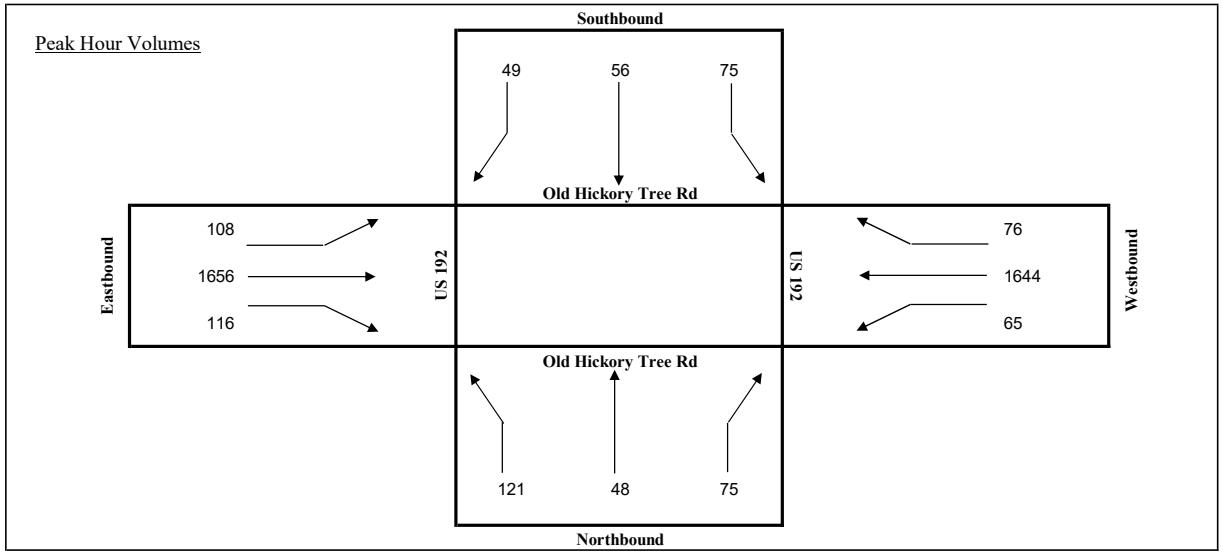


TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

Intersection (N/S): Old Hickory Tree Rd
Intersection (E/W): US 192
Date: 1/10/2024

			Old Hickory Tree Rd			Old Hickory Tree Rd			US 192			US 192			
			NB			SB			EB			WB			
	Start	End	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
	4:00 PM	4:15 PM	19	11	22	17	10	7	21	304	21	10	376	14	832
	4:15 PM	4:30 PM	23	5	20	21	11	6	19	350	29	13	400	19	916
	4:30 PM	4:45 PM	31	11	20	19	13	9	26	390	31	10	417	19	996
	4:45 PM	5:00 PM	25	13	14	19	13	11	34	422	29	18	424	24	1046
	5:00 PM	5:15 PM	35	10	23	19	19	17	27	421	31	17	398	15	1032
	5:15 PM	5:30 PM	30	14	18	18	11	12	21	423	25	20	405	18	1015
	5:30 PM	5:45 PM	38	14	24	10	12	11	20	399	33	17	349	16	943
	5:45 PM	6:00 PM	35	8	20	11	12	14	23	367	26	23	305	21	865
Total for:	4:00 PM	5:00 PM	98	40	76	76	47	33	100	1466	110	51	1617	76	3790
Total for:	5:00 PM	6:00 PM	138	46	85	58	54	54	91	1610	115	77	1457	70	3855
Tota Peak Hour:	4:30 PM	5:30 PM	121	48	75	75	56	49	108	1656	116	65	1644	76	4089
Overall PHF:	0.98														

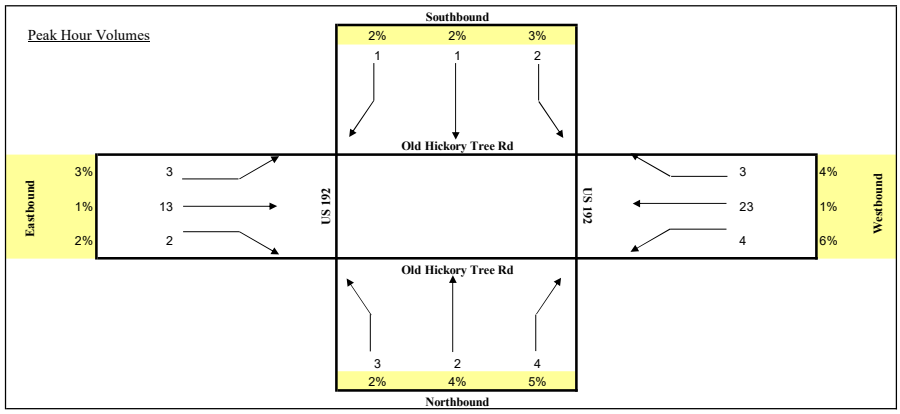


TURNING MOVEMENT COUNT ANALYSIS

TRUCKS

Intersection (N/S): Old Hickory Tree Rd
Intersection (E/W): US 192
Date: 1/10/2024

		Old Hickory Tree Rd			Old Hickory Tree Rd			US 192			US 192			
		NB			SB			EB			WB			
Start	End	R	T	L	R	T	L	R	T	L	R	T	L	TOTAL
4:00 PM	4:15 PM	2	0	2	0	1	0	1	6	1	1	8	2	24
4:15 PM	4:30 PM	1	0	0	1	0	1	1	6	1	1	6	0	18
4:30 PM	4:45 PM	0	1	1	1	0	0	0	1	0	0	5	0	9
4:45 PM	5:00 PM	0	1	1	0	0	0	1	0	0	2	4	1	10
5:00 PM	5:15 PM	1	0	0	0	1	1	0	2	0	0	2	1	8
5:15 PM	5:30 PM	0	0	0	1	0	0	0	2	1	0	3	0	7
5:30 PM	5:45 PM	0	1	0	0	0	1	1	2	0	0	2	0	7
5:45 PM	6:00 PM	0	0	1	0	0	0	0	1	0	1	2	0	5
Total for:	4:00 PM	5:00 PM	3	2	4	2	1	1	3	13	2	4	23	3	61
Total for:	5:00 PM	6:00 PM	1	1	1	1	1	2	1	7	1	1	9	1	27
Tota Peak Hour:	4:00 PM	5:00 PM	3	2	4	2	1	1	3	13	2	4	23	3	61
Overall PHF:	0.64														

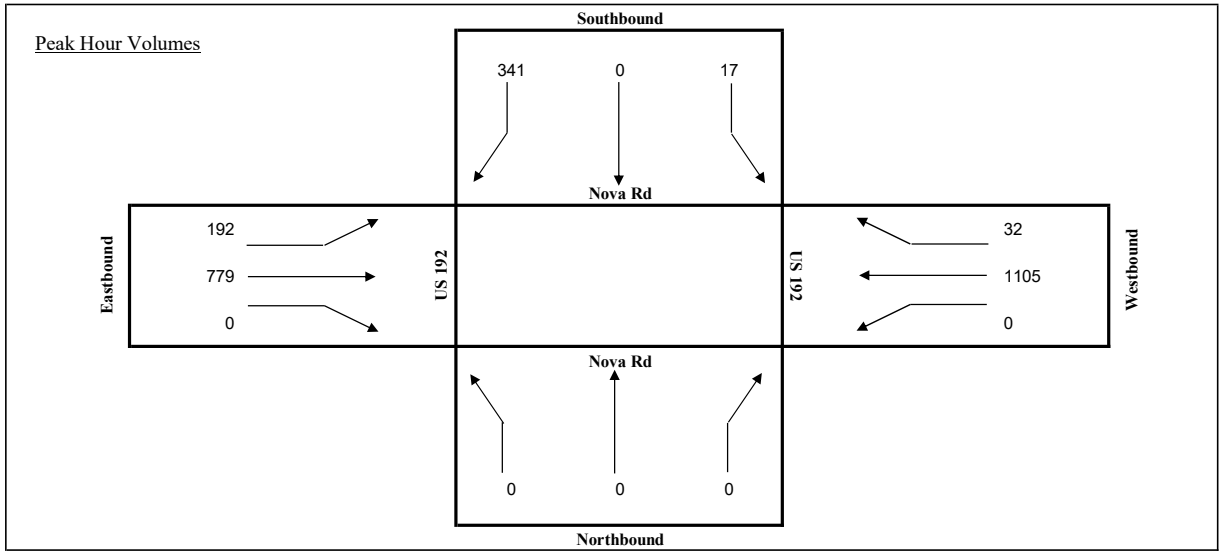


TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

Intersection (N/S): Nova Rd
Intersection (E/W): US 192
Date: 1/10/2024

		Nova Rd			Nova Rd			US 192			US 192			
		NB			SB			EB			WB			
Start	End	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 AM	7:15 AM	0	0	0	2	0	80	40	166	0	0	211	7	506
7:15 AM	7:30 AM	0	0	0	8	0	90	32	157	0	0	262	10	559
7:30 AM	7:45 AM	0	0	0	6	0	98	48	176	0	0	295	9	632
7:45 AM	8:00 AM	0	0	0	4	0	88	49	203	0	0	284	9	637
8:00 AM	8:15 AM	0	0	0	4	0	73	42	190	0	0	274	5	588
8:15 AM	8:30 AM	0	0	0	3	0	82	53	210	0	0	252	9	609
8:30 AM	8:45 AM	0	0	0	4	0	69	41	178	0	0	256	4	552
8:45 AM	9:00 AM	0	0	0	2	0	69	37	149	0	0	233	5	495
Total for:	7:00 AM	8:00 AM	0	0	0	20	0	356	169	702	0	0	1052	35	2334
Total for:	8:00 AM	9:00 AM	0	0	0	13	0	293	173	727	0	0	1015	23	2244
Tota Peak Hour:	7:30 AM	8:30 AM	0	0	0	17	0	341	192	779	0	0	1105	32	2466
Overall PHF:	0.97														

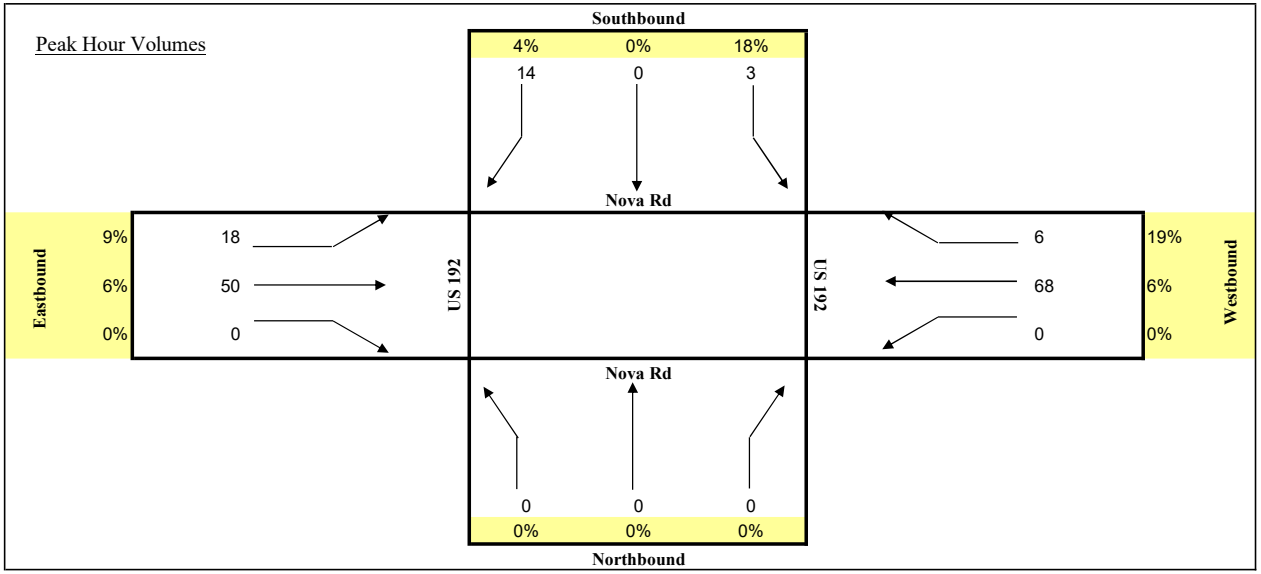


TURNING MOVEMENT COUNT ANALYSIS

TRUCKS

Intersection (N/S): Nova Rd
Intersection (E/W): US 192
Date: 1/10/2024

		Nova Rd			Nova Rd			US 192			US 192			
		NB			SB			EB			WB			
Start	End	R	T	L	R	T	L	R	T	L	R	T	L	TOTAL
7:00 AM	7:15 AM	0	0	0	0	0	5	5	12	0	0	14	2	38
7:15 AM	7:30 AM	0	0	0	2	0	2	2	15	0	0	16	1	38
7:30 AM	7:45 AM	0	0	0	1	0	6	4	10	0	0	18	0	39
7:45 AM	8:00 AM	0	0	0	0	0	1	7	13	0	0	20	3	44
8:00 AM	8:15 AM	0	0	0	1	0	4	3	12	0	0	16	1	37
8:15 AM	8:30 AM	0	0	0	1	0	2	5	9	0	0	13	2	32
8:30 AM	8:45 AM	0	0	0	0	0	3	1	13	0	0	16	1	34
8:45 AM	9:00 AM	0	0	0	1	0	6	4	6	0	0	12	0	29
Total for:	7:00 AM	8:00 AM	0	0	0	3	0	14	18	50	0	0	68	6	159
Total for:	8:00 AM	9:00 AM	0	0	0	3	0	15	13	40	0	0	57	4	132
Tota Peak Hour:	7:00 AM	8:00 AM	0	0	0	3	0	14	18	50	0	0	68	6	159
Overall PHF:	0.90														

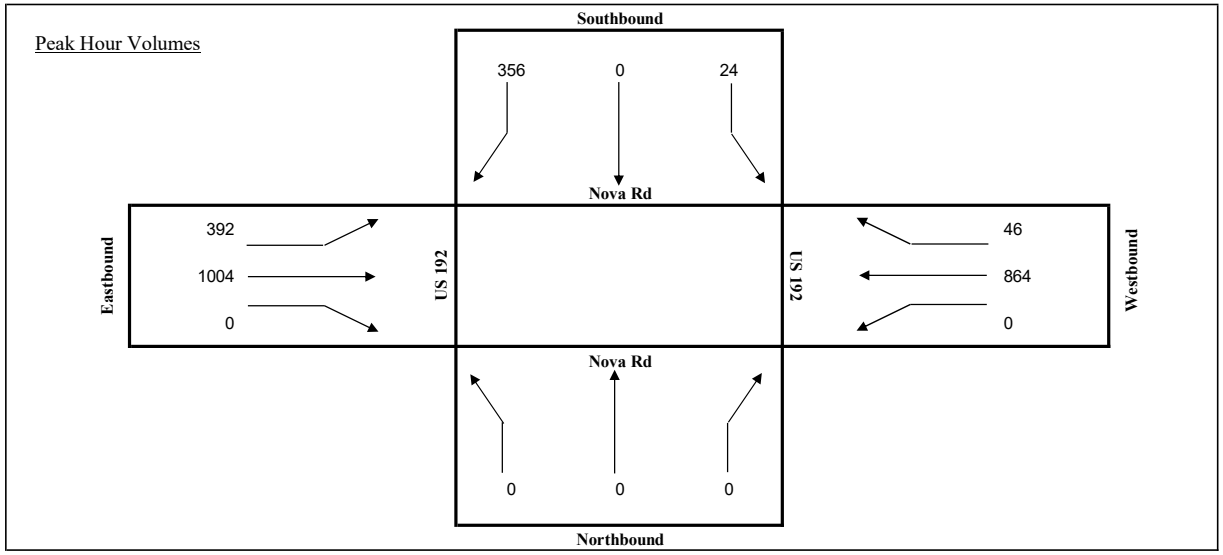


TURNING MOVEMENT COUNT ANALYSIS

AUTOS & TRUCKS

Intersection (N/S): Nova Rd
Intersection (E/W): US 192
Date: 1/10/2024

			Nova Rd			Nova Rd			US 192			US 192			
			NB			SB			EB			WB			
	Start	End	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
	4:00 PM	4:15 PM	0	0	0	2	0	77	103	241	0	0	196	13	632
	4:15 PM	4:30 PM	0	0	0	2	0	67	96	269	0	0	214	12	660
	4:30 PM	4:45 PM	0	0	0	7	0	84	99	259	0	0	213	15	677
	4:45 PM	5:00 PM	0	0	0	4	0	82	103	265	0	0	225	12	691
	5:00 PM	5:15 PM	0	0	0	6	0	95	90	242	0	0	200	8	641
	5:15 PM	5:30 PM	0	0	0	7	0	95	100	238	0	0	226	11	677
	5:30 PM	5:45 PM	0	0	0	2	0	89	103	256	0	0	203	10	663
	5:45 PM	6:00 PM	0	0	0	2	0	83	96	234	0	0	222	13	650
Total for:	4:00 PM	5:00 PM	0	0	0	15	0	310	401	1034	0	0	848	52	2660
Total for:	5:00 PM	6:00 PM	0	0	0	17	0	362	389	970	0	0	851	42	2631
Tota Peak Hour:	4:30 PM	5:30 PM	0	0	0	24	0	356	392	1004	0	0	864	46	2686
Overall PHF:	0.97														

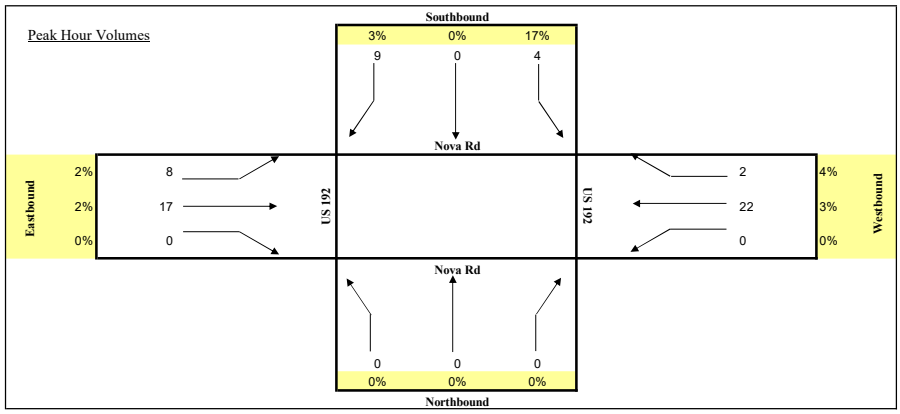


TURNING MOVEMENT COUNT ANALYSIS

TRUCKS

Intersection (N/S): Nova Rd
Intersection (E/W): US 192
Date: 1/10/2024

		Nova Rd NB			Nova Rd SB			US 192 EB			US 192 WB			
Start	End	R	T	L	R	T	L	R	T	L	R	T	L	TOTAL
4:00 PM	4:15 PM	0	0	0	1	0	3	3	2	0	0	6	0	15
4:15 PM	4:30 PM	0	0	0	0	0	1	0	5	0	0	3	2	11
4:30 PM	4:45 PM	0	0	0	2	0	4	4	4	0	0	8	0	22
4:45 PM	5:00 PM	0	0	0	1	0	1	1	6	0	0	5	0	14
5:00 PM	5:15 PM	0	0	0	0	0	2	2	2	0	0	2	1	9
5:15 PM	5:30 PM	0	0	0	1	0	0	3	2	0	0	7	0	13
5:30 PM	5:45 PM	0	0	0	1	0	2	1	2	0	0	3	0	9
5:45 PM	6:00 PM	0	0	0	0	0	0	2	3	0	0	6	1	12
Total for:	4:00 PM	5:00 PM	0	0	0	4	0	9	8	17	0	0	22	2	62
Total for:	5:00 PM	6:00 PM	0	0	0	2	0	4	8	9	0	0	18	2	43
Tota Peak Hour:	4:00 PM	5:00 PM	0	0	0	4	0	9	8	17	0	0	22	2	62
Overall PHF:	0.70														



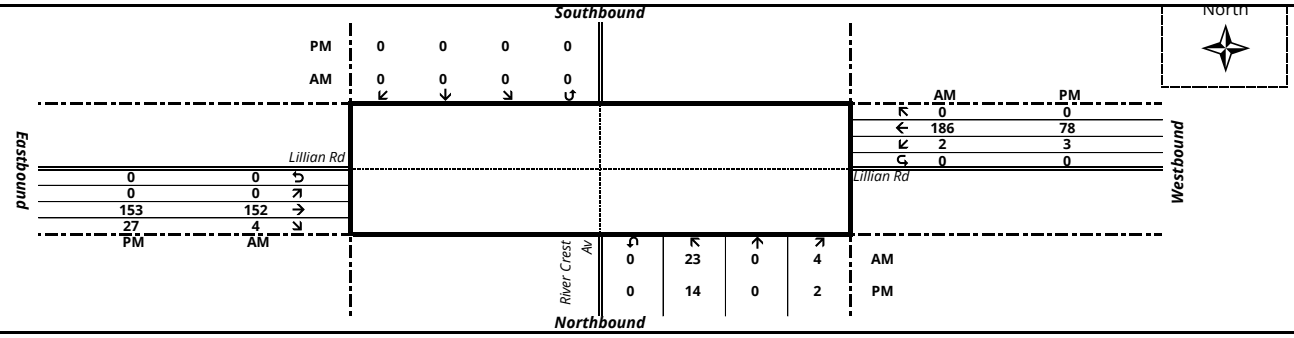
15 MINUTE TURNING MOVEMENT COUNTS

(Cars and Trucks)

DATE: November 12, 2024 (Tuesday) **CITY:** St Cloud **LATITUDE:** 0

LOCATION: River Crest Av & Lillian Rd **COUNTY:** Osceola County **LONGITUDE:** 0

	River Crest Av											Lillian Rd					Lillian Rd						
TIME	**NORTHBOUND**					**SOUTHBOUND**					**N/S**	**EASTBOUND**					**WESTBOUND**					**E/W**	**GRAND**
BEGIN	**L**	**T**	**R**	***U-turn***	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**TOTAL**	**TOTAL**
07:00 AM	8	0	1	0	**9**	0	0	0	0	**0**	**9**	0	27	1	0	**28**	0	20	0	0	**20**	**48**	**57**
07:15 AM	2	0	1	0	**3**	0	0	0	0	**0**	**3**	0	26	1	0	**27**	0	43	0	0	**43**	**70**	**73**
07:30 AM	2	0	2	0	**4**	0	0	0	0	**0**	**4**	0	50	0	0	**50**	1	59	0	0	**60**	**110**	**114**
07:45 AM	11	0	0	0	**11**	0	0	0	0	**0**	**11**	0	49	2	0	**51**	1	64	0	0	**65**	**116**	**127**
TOTAL	23	0	4	0	**27**	0	0	0	0	**0**	**27**	0	152	4	0	**156**	2	186	0	0	**188**	**344**	**371**
08:00 AM	2	0	2	0	**4**	0	0	0	0	**0**	**4**	0	9	2	0	**11**	0	31	0	0	**31**	**42**	**46**
08:15 AM	2	0	1	0	**3**	0	0	0	0	**0**	**3**	0	13	2	0	**15**	1	15	0	0	**16**	**31**	**34**
08:30 AM	4	0	1	0	**5**	0	0	0	0	**0**	**5**	0	8	5	0	**13**	0	11	0	0	**11**	**24**	**29**
08:45 AM	5	0	0	0	**5**	0	0	0	0	**0**	**5**	0	14	5	0	**19**	1	8	0	0	**9**	**28**	**33**
TOTAL	13	0	4	0	**17**	0	0	0	0	**0**	**17**	0	44	14	0	**58**	2	65	0	0	**67**	**125**	**142**
04:00 PM	1	0	1	0	**2**	0	0	0	0	**0**	**2**	0	31	6	0	**37**	2	13	0	0	**15**	**52**	**54**
04:15 PM	1	0	0	0	**1**	0	0	0	0	**0**	**1**	0	44	4	0	**48**	0	16	0	0	**16**	**64**	**65**
04:30 PM	3	0	1	0	**4**	0	0	0	0	**0**	**4**	0	42	11	0	**53**	1	24	0	0	**25**	**78**	**82**
04:45 PM	3	0	0	0	**3**	0	0	0	0	**0**	**3**	0	32	7	0	**39**	1	17	0	0	**18**	**57**	**60**
TOTAL	8	0	2	0	**10**	0	0	0	0	**0**	**10**	0	149	28	0	**177**	4	70	0	0	**74**	**251**	**261**
05:00 PM	5	0	1	0	**6**	0	0	0	0	**0**	**6**	0	30	5	0	**35**	0	20	0	0	**20**	**55**	**61**
05:15 PM	3	0	0	0	**3**	0	0	0	0	**0**	**3**	0	49	4	0	**53**	1	17	0	0	**18**	**71**	**74**
05:30 PM	3	0	1	0	**4**	0	0	0	0	**0**	**4**	0	41	7	0	**48**	2	23	0	0	**25**	**73**	**77**
05:45 PM	4	0	1	0	**5**	0	0	0	0	**0**	**5**	0	32	5	0	**37**	0	13	0	0	**13**	**50**	**55**
TOTAL	15	0	3	0	**18**	0	0	0	0	**0**	**18**	0	152	21	0	**173**	3	73	0	0	**76**	**249**	**267**
AM Peak																						**Peak Hour Factor:**	**0.730**
07:00 AM to 08:00 AM	**23**	**0**	**4**	**0**	**27**	**0**	**0**	**0**	**0**	**0**	**27**	**0**	**152**	**4**	**0**	**156**	**2**	**186**	**0**	**0**	**188**	**344**	**371**
PM Peak																						**Peak Hour Factor:**	**0.845**
04:30 PM to 05:30 PM	**14**	**0**	**2**	**0**	**16**	**0**	**0**	**0**	**0**	**0**	**16**	**0**	**153**	**27**	**0**	**180**	**3**	**78**	**0**	**0**	**81**	**261**	**277**



15 MINUTE TURNING MOVEMENT COUNTS

(Trucks Only)

DATE: November 12, 2024 (Tuesday) **CITY:** St Cloud **LATITUDE:** 0

LOCATION: River Crest Av & Lillian Rd **COUNTY:** Osceola County **LONGITUDE:** 0

	River Crest Av											Lillian Rd					Lillian Rd						
TIME	**NORTHBOUND**					**SOUTHBOUND**					**N/S**	**EASTBOUND**					**WESTBOUND**					**E/W**	**GRAND**
BEGIN	**L**	**T**	**R**	***U-turn***	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**L**	**T**	**R**	***U-turn***	**TOTAL**	**TOTAL**	**TOTAL**
07:00 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	1	0	0	**1**	**1**	**1**
07:15 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	1	0	0	**1**	0	0	0	0	**0**	**1**	**1**
07:30 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	1	0	0	**1**	0	0	0	0	**0**	**1**	**1**
07:45 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
TOTAL	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	2	0	0	**2**	0	1	0	0	**1**	**3**	**3**
08:00 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	1	0	0	**1**	0	2	0	0	**2**	**3**	**3**
08:15 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	2	0	0	**2**	**2**	**2**
08:30 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	1	0	0	**1**	0	1	0	0	**1**	**2**	**2**
08:45 AM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	1	0	0	**1**	**1**	**1**
TOTAL	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	2	0	0	**2**	0	6	0	0	**6**	**8**	**8**
04:00 PM	1	0	0	0	**1**	0	0	0	0	**0**	**1**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**1**
04:15 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
04:30 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	1	0	0	**1**	0	0	0	0	**0**	**1**	**1**
04:45 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
TOTAL	1	0	0	0	**1**	0	0	0	0	**0**	**1**	0	1	0	0	**1**	0	0	0	0	**0**	**1**	**2**
05:00 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	2	0	0	**2**	0	0	0	0	**0**	**2**	**2**
05:15 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
05:30 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	1	0	0	**1**	0	0	0	0	**0**	**1**	**1**
05:45 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**	**0**
TOTAL	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	3	0	0	**3**	0	0	0	0	**0**	**3**	**3**
AM Peak																							
07:00 AM to 08:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**1**	**3**	**3**
PM Peak																							
04:30 PM to 05:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**3**	**3**

2023 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 9200 OSCEOLA COUNTYWIDE

MOCF: 0.98

WEEK	DATES	SF	PSCF
1	01/01/2023 - 01/07/2023	1.02	1.04
2	01/08/2023 - 01/14/2023	1.02	1.04
3	01/15/2023 - 01/21/2023	1.02	1.04
4	01/22/2023 - 01/28/2023	1.01	1.03
5	01/29/2023 - 02/04/2023	1.00	1.02
6	02/05/2023 - 02/11/2023	0.99	1.01
* 7	02/12/2023 - 02/18/2023	0.98	1.00
* 8	02/19/2023 - 02/25/2023	0.98	1.00
* 9	02/26/2023 - 03/04/2023	0.97	0.99
*10	03/05/2023 - 03/11/2023	0.97	0.99
*11	03/12/2023 - 03/18/2023	0.96	0.98
*12	03/19/2023 - 03/25/2023	0.97	0.99
*13	03/26/2023 - 04/01/2023	0.98	1.00
*14	04/02/2023 - 04/08/2023	0.98	1.00
*15	04/09/2023 - 04/15/2023	0.99	1.01
*16	04/16/2023 - 04/22/2023	0.99	1.01
*17	04/23/2023 - 04/29/2023	0.99	1.01
*18	04/30/2023 - 05/06/2023	0.99	1.01
*19	05/07/2023 - 05/13/2023	0.99	1.01
20	05/14/2023 - 05/20/2023	0.99	1.01
21	05/21/2023 - 05/27/2023	1.00	1.02
22	05/28/2023 - 06/03/2023	1.00	1.02
23	06/04/2023 - 06/10/2023	1.01	1.03
24	06/11/2023 - 06/17/2023	1.01	1.03
25	06/18/2023 - 06/24/2023	1.01	1.03
26	06/25/2023 - 07/01/2023	1.01	1.03
27	07/02/2023 - 07/08/2023	1.01	1.03
28	07/09/2023 - 07/15/2023	1.01	1.03
29	07/16/2023 - 07/22/2023	1.01	1.03
30	07/23/2023 - 07/29/2023	1.02	1.04
31	07/30/2023 - 08/05/2023	1.02	1.04
32	08/06/2023 - 08/12/2023	1.02	1.04
33	08/13/2023 - 08/19/2023	1.03	1.05
34	08/20/2023 - 08/26/2023	1.03	1.05
35	08/27/2023 - 09/02/2023	1.03	1.05
36	09/03/2023 - 09/09/2023	1.02	1.04
37	09/10/2023 - 09/16/2023	1.02	1.04
38	09/17/2023 - 09/23/2023	1.02	1.04
39	09/24/2023 - 09/30/2023	1.02	1.04
40	10/01/2023 - 10/07/2023	1.01	1.03
41	10/08/2023 - 10/14/2023	1.01	1.03
42	10/15/2023 - 10/21/2023	1.00	1.02
43	10/22/2023 - 10/28/2023	1.00	1.02
44	10/29/2023 - 11/04/2023	1.00	1.02
45	11/05/2023 - 11/11/2023	1.00	1.02
46	11/12/2023 - 11/18/2023	1.00	1.02
47	11/19/2023 - 11/25/2023	1.01	1.03
48	11/26/2023 - 12/02/2023	1.01	1.03
49	12/03/2023 - 12/09/2023	1.01	1.03
50	12/10/2023 - 12/16/2023	1.02	1.04
51	12/17/2023 - 12/23/2023	1.02	1.04
52	12/24/2023 - 12/30/2023	1.02	1.04
53	12/31/2023 - 12/31/2023	1.02	1.04

* PEAK SEASON

09-MAR-2024 18:41:41 830UPD 5_9200_PKSEASON.TXT

Appendix I
Projected Intersection Volume Calculations

Project No. 24028.01.01 Nona Townhomes

Intersection Volumes

Period	Tgen	Enter	Exit	SF	Legend
AM Peak	68	17	51	1.02	Existing + {Vested} + (Project) = Total

Intersection= Rummell Rd and Narcoossee Rd — 1

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	222	1.02	226	1.000		0	0	0	226			0	226	226
EB	T	3	1.02	3	1.000		0	0	0	3			0	3	3
	R	34	1.02	35	1.000		0	1	1	36			0	36	35 + {1} = 36
	L	8	1.02	8	1.000		0	0	0	8			0	8	8
WB	T	3	1.02	3	1.000		0	0	0	3			0	3	3
	R	2	1.02	2	1.000		0	0	0	2			0	2	2
	L	7	1.02	7	1.000		0	3	3	10			0	10	7 + {3} = 10
NB	T	1100	1.02	1,122	1.000		72	25	97	1,219		25%	13	1232	1122 + {97} + (13) = 1232
	R	27	1.02	28	1.000		0	0	0	28			0	28	28
	L	11	1.02	11	1.000		0	0	0	11			0	11	11
SB	T	957	1.02	976	1.000		24	6	30	1,006	25%		4	1010	976 + {30} + (4) = 1010
	R	119	1.02	121	1.000		0	0	0	121			0	121	121

Intersection= Lillian Lee Rd and Narcoossee Rd — 2

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	11	1.02	11	1.000		0	0	0	11			0	11	11
EB	T	2	1.02	2	1.000		0	0	0	2			0	2	2
	R	34	1.02	35	1.000		0	0	0	35			0	35	35
	L	17	1.02	17	1.000		107	3	110	127		15%	8	135	17 + {110} + (8) = 135
WB	T	2	1.02	2	1.000		0	0	0	2			0	2	2
	R	157	1.02	160	1.000		72	0	72	232		25%	13	245	160 + {72} + (13) = 245
	L	6	1.02	6	1.000		0	0	0	6			0	6	6
NB	T	1451	1.02	1,480	1.000		0	13	13	1,493			0	1493	1480 + {13} = 1493
	R	35	1.02	36	1.000		36	1	37	73	15%		3	76	36 + {37} + (3) = 76
	L	75	1.02	77	1.000		24	1	25	102	25%		4	106	77 + {25} + (4) = 106
SB	T	1009	1.02	1,029	1.000		0	36	36	1,065			0	1065	1029 + {36} = 1065
	R	6	1.02	6	1.000		0	0	0	6			0	6	6

Intersection= Tenth (10th) Street and Narcoossee Rd — 3

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	94	1.02	96	1.000		5	3	8	104	5%		1	105	96 + {8} + (1) = 105
EB	T	2	1.02	2	1.000		0	0	0	2			0	2	2
	R	48	1.02	49	1.000		1	0	1	50			0	50	49 + {1} = 50
	L	36	1.02	37	1.000		0	0	0	37			0	37	37
WB	T	2	1.02	2	1.000		0	0	0	2			0	2	2
	R	43	1.02	44	1.000		0	0	0	44			0	44	44
	L	21	1.02	21	1.000		5	0	5	26			0	26	21 + {5} = 26
NB	T	1359	1.02	1,386	1.000		31	11	42	1,428	10%		2	1430	1386 + {42} + (2) = 1430
	R	21	1.02	21	1.000		0	0	0	21			0	21	21
	L	9	1.02	9	1.000		0	0	0	9			0	9	9
SB	T	1009	1.02	1,029	1.000		94	34	128	1,157		10%	5	1162	1029 + {128} + (5) = 1162
	R	41	1.02	42	1.000		13	5	18	60		5%	3	63	42 + {18} + (3) = 63

Intersection= US 192 and Narcoossee Rd / Hickory Tree Rd — 4

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	584	1.02	596	1.000		27	5	32	628	8%		1	629	596 + {32} + (1) = 629
EB	T	830	1.02	847	1.000		23	0	23	870	37%		6	876	847 + {23} + (6) = 876
	R	106	1.02	108	1.000		0	0	0	108			0	108	108
	L	184	1.02	188	1.000		22	0	22	210		3%	1	211	188 + {22} + (1) = 211
WB	T	1263	1.02	1,288	1.000		100	0	100	1,388		37%	19	1407	1288 + {100} + (19) = 1407
	R	278	1.02	284	1.000		5	3	8	292			0	292	284 + {8} = 292
	L	147	1.02	150	1.000		0	0	0	150			0	150	150
NB	T	384	1.02	392	1.000		4	3	7	399	2%		1	400	392 + {7} + (1) = 400
	R	76	1.02	78	1.000		7	0	7	85	3%		1	86	78 + {7} + (1) = 86
	L	431	1.02	440	1.000		31	10	41	481			0	481	440 + {41} = 481
SB	T	207	1.02	211	1.000		24	7	31	242		2%	1	243	211 + {31} + (1) = 243
	R	419	1.02	427	1.000		40	17	57	484		8%	4	488	427 + {57} + (4) = 488

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Intersection Volumes

Period	Tgen	Enter	Exit	SF	Legend
AM Peak	68	17	51	1.02	Existing + {Vested} + (Project) = Total

Intersection= US 192 and Old Hickory Tree Rd — 5

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	63	1.02	**64**	1.000		0	0	0	**64**			**0**	**64**	**64**
EB	T	1002	1.02	**1,022**	1.000		45	3	48	**1,070**	40%		**6**	**1076**	**1022 + {48} + (6) = 1076**
	R	64	1.02	**65**	1.000		0	0	0	**65**			**0**	**65**	**65**
	L	48	1.02	**49**	1.000		17	7	24	**73**		5%	**3**	**76**	**49 + {24} + (3) = 76**
WB	T	1529	1.02	**1,560**	1.000		133	10	143	**1,703**		40%	**20**	**1723**	**1560 + {143} + (20) = 1723**
	R	62	1.02	**63**	1.000		0	0	0	**63**			**0**	**63**	**63**
	L	121	1.02	**123**	1.000		0	0	0	**123**			**0**	**123**	**123**
NB	T	51	1.02	**52**	1.000		0	0	0	**52**			**0**	**52**	**52**
	R	56	1.02	**57**	1.000		5	2	7	**64**	5%		**1**	**65**	**57 + {7} + (1) = 65**
	L	57	1.02	**58**	1.000		0	0	0	**58**			**0**	**58**	**58**
SB	T	37	1.02	**38**	1.000		0	0	0	**38**			**0**	**38**	**38**
	R	57	1.02	**58**	1.000		0	0	0	**58**			**0**	**58**	**58**

Intersection= US 192 and Puffin Rd — 6

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L		1.02	**0**	1.000		0	0	0	**0**	40%		**7**	**7**	**(7)**
EB	T	1337	1.02	**1,364**	1.000		66	10	76	**1,440**			**0**	**1440**	**1364 + {76} = 1440**
	R		1.02	**0**	1.000		0	0	0	**0**			**0**	**0**	
	L		1.02	**0**	1.000		0	0	0	**0**			**0**	**0**	
WB	T	1725	1.02	**1,760**	1.000		127	3	130	**1,890**			**0**	**1890**	**1760 + {130} = 1890**
	R		1.02	**0**	1.000		0	0	0	**0**	20%		**3**	**3**	**(3)**
	L		1.02	**0**	1.000		0	0	0	**0**			**0**	**0**	
NB	T		1.02	**0**	1.000		0	0	0	**0**			**0**	**0**	
	R		1.02	**0**	1.000		0	0	0	**0**			**0**	**0**	
	L		1.02	**0**	1.000		0	0	0	**0**		20%	**10**	**10**	**(10)**
SB	T		1.02	**0**	1.000		0	0	0	**0**			**0**	**0**	
	R		1.02	**0**	1.000		0	0	0	**0**		40%	**20**	**20**	**(20)**

Intersection= US 192 and Nova Rd — 7

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	192	1.02	**196**	1.000		29	7	36	**232**		10%	**5**	**237**	**196 + {36} + (5) = 237**
EB	T	779	1.02	**795**	1.000		37	3	40	**835**		10%	**5**	**840**	**795 + {40} + (5) = 840**
	R	0	1.02	**0**	1.000		0	0	0	**0**			**0**	**0**	
	L	0	1.02	**0**	1.000		0	0	0	**0**			**0**	**0**	
WB	T	1105	1.02	**1,127**	1.000		11	1	12	**1,139**	10%		**2**	**1141**	**1127 + {12} + (2) = 1141**
	R	32	1.02	**33**	1.000		3	0	3	**36**			**0**	**36**	**33 + {3} = 36**
	L	0	1.02	**0**	1.000		0	0	0	**0**			**0**	**0**	
NB	T	0	1.02	**0**	1.000		0	0	0	**0**			**0**	**0**	
	R	0	1.02	**0**	1.000		0	0	0	**0**			**0**	**0**	
	L	17	1.02	**17**	1.000		10	0	10	**27**			**0**	**27**	**17 + {10} = 27**
SB	T	0	1.02	**0**	1.000		0	0	0	**0**			**0**	**0**	
	R	341	1.02	**348**	1.000		10	2	12	**360**	10%		**1**	**361**	**348 + {12} + (1) = 361**

Intersection= Lillian Lee Rd and River Crest Ave — 8

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	0	1.00	**0**	1.000		0	0	0	**0**			**0**	**0**	
EB	T	152	1.00	**152**	1.000		60	2	62	**214**			**0**	**214**	**152 + {62} = 214**
	R	4	1.00	**4**	1.000		0	0	0	**4**	40%		**7**	**11**	**4 + (7) = 11**
	L	2	1.00	**2**	1.000		0	0	0	**2**			**0**	**2**	**2**
WB	T	186	1.00	**186**	1.000		179	3	182	**368**			**0**	**368**	**186 + {182} = 368**
	R	0	1.00	**0**	1.000		0	0	0	**0**			**0**	**0**	
	L	23	1.00	**23**	1.000		0	0	0	**23**		40%	**21**	**44**	**23 + (21) = 44**
NB	T	0	1.00	**0**	1.000		0	0	0	**0**			**0**	**0**	
	R	4	1.00	**4**	1.000		0	0	0	**4**			**0**	**4**	**4**
	L	0	1.00	**0**	1.000		0	0	0	**0**			**0**	**0**	
SB	T	0	1.00	**0**	1.000		0	0	0	**0**			**0**	**0**	
	R	0	1.00	**0**	1.000		0	0	0	**0**			**0**	**0**	

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Intersection Volumes

Period	Tgen	Enter	Exit	SF	Legend
AM Peak	68	17	51	1.02	Existing + {Vested} + (Project) = Total

Intersection= Puffin Rd and Access A — 9

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	0	1.00	0	1.000		0	0	0	0			0	0	
EB	T	0	1.00	0	1.000		0	0	0	0			0	0	
	R	0	1.00	0	1.000		0	0	0	0		12%	6	6	(6)
	L	0	1.00	0	1.000		0	0	0	0			0	0	
WB	T	0	1.00	0	1.000		0	0	0	0			0	0	
	R	0	1.00	0	1.000		0	0	0	0			0	0	
	L	0	1.00	0	1.000		0	0	0	0	12%		2	2	(2)
NB	T	1	1.00	1	1.000		86	0	86	87			0	87	1 + {86} = 87
	R	0	1.00	0	1.000		0	0	0	0			0	0	
	L	0	1.00	0	1.000		0	0	0	0			0	0	
SB	T	3	1.00	3	1.000		98	0	98	101			0	101	3 + {98} = 101
	R	0	1.00	0	1.000		0	0	0	0			0	0	

Intersection= Puffin Rd and Access B — 10

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	0	1.00	0	1.000		0	0	0	0			0	0	
EB	T	0	1.00	0	1.000		0	0	0	0			0	0	
	R	0	1.00	0	1.000		0	0	0	0		12%	6	6	(6)
	L	0	1.00	0	1.000		0	0	0	0			0	0	
WB	T	0	1.00	0	1.000		0	0	0	0			0	0	
	R	0	1.00	0	1.000		0	0	0	0			0	0	
	L	0	1.00	0	1.000		0	0	0	0	12%		2	2	(2)
NB	T	1	1.00	1	1.000		86	0	86	87	12%		2	89	1 + {86} + (2) = 89
	R	0	1.00	0	1.000		0	0	0	0			0	0	
	L	0	1.00	0	1.000		0	0	0	0			0	0	
SB	T	3	1.00	3	1.000		98	0	98	101		12%	6	107	3 + {98} + (6) = 107
	R	0	1.00	0	1.000		0	0	0	0			0	0	

Intersection= Puffin Rd and Access C — 11

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	0	1.00	0	1.000		0	0	0	0			0	0	
EB	T	0	1.00	0	1.000		0	0	0	0			0	0	
	R	0	1.00	0	1.000		0	0	0	0		12%	6	6	(6)
	L	0	1.00	0	1.000		0	0	0	0			0	0	
WB	T	0	1.00	0	1.000		0	0	0	0			0	0	
	R	0	1.00	0	1.000		0	0	0	0			0	0	
	L	0	1.00	0	1.000		0	0	0	0	12%		2	2	(2)
NB	T	1	1.00	1	1.000		86	0	86	87	24%		4	91	1 + {86} + (4) = 91
	R	0	1.00	0	1.000		0	0	0	0			0	0	
	L	0	1.00	0	1.000		0	0	0	0			0	0	
SB	T	3	1.00	3	1.000		98	0	98	101		24%	12	113	3 + {98} + (12) = 113
	R	0	1.00	0	1.000		0	0	0	0			0	0	

Intersection= Puffin Rd and Access D — 12

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	0	1.00	0	1.000		0	0	0	0			0	0	
EB	T	0	1.00	0	1.000		0	0	0	0			0	0	
	R	0	1.00	0	1.000		0	0	0	0		12%	6	6	(6)
	L	0	1.00	0	1.000		0	0	0	0			0	0	
WB	T	0	1.00	0	1.000		0	0	0	0			0	0	
	R	0	1.00	0	1.000		0	0	0	0			0	0	
	L	0	1.00	0	1.000		0	0	0	0	12%		2	2	(2)
NB	T	1	1.00	1	1.000		86	0	86	87	36%		6	93	1 + {86} + (6) = 93
	R	0	1.00	0	1.000		0	0	0	0			0	0	
	L	0	1.00	0	1.000		0	0	0	0			0	0	
SB	T	3	1.00	3	1.000		98	0	98	101		36%	18	119	3 + {98} + (18) = 119
	R	0	1.00	0	1.000		0	0	0	0			0	0	

Intersection= Puffin Rd and Access E — 13

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	0	1.00	0	1.000		0	0	0	0			0	0	
EB	T	0	1.00	0	1.000		0	0	0	0			0	0	
	R	0	1.00	0	1.000		0	0	0	0		12%	6	6	(6)
	L	0	1.00	0	1.000		0	0	0	0			0	0	
WB	T	0	1.00	0	1.000		0	0	0	0			0	0	
	R	0	1.00	0	1.000		0	0	0	0			0	0	
	L	0	1.00	0	1.000		0	0	0	0	12%		2	2	(2)
NB	T	1	1.00	1	1.000		86	0	86	87	48%		8	95	1 + {86} + (8) = 95
	R	0	1.00	0	1.000		0	0	0	0			0	0	
	L	0	1.00	0	1.000		0	0	0	0			0	0	
SB	T	3	1.00	3	1.000		98	0	98	101		48%	24	125	3 + {98} + (24) = 125
	R	0	1.00	0	1.000		0	0	0	0			0	0	

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Intersection Volumes

Period	Tgen	Enter	Exit	SF	Legend
PM Peak	81	48	33	1.02	Existing + {Vested} + (Project) = Total

Intersection= Rummell Rd and Narcoossee Rd — 1

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	268	1.02	273	1.000		0	0	0	273			0	273	273
EB	T	13	1.02	13	1.000		0	0	0	13			0	13	13
	R	42	1.02	43	1.000		0	3	3	46			0	46	43 + {3} = 46
	L	17	1.02	17	1.000		0	0	0	17			0	17	17
WB	T	21	1.02	21	1.000		0	0	0	21			0	21	21
	R	17	1.02	17	1.000		0	0	0	17			0	17	17
	L	37	1.02	38	1.000		0	2	2	40			0	40	38 + {2} = 40
NB	T	1256	1.02	1,281	1.000		45	14	59	1,340		25%	8	1348	1281 + {59} + (8) = 1348
	R	21	1.02	21	1.000		0	0	0	21			0	21	21
	L	20	1.02	20	1.000		0	0	0	20			0	20	20
SB	T	1614	1.02	1,646	1.000		76	25	101	1,747	25%		12	1759	1646 + {101} + (12) = 1759
	R	220	1.02	224	1.000		0	0	0	224			0	224	224

Intersection= Lillian Lee Rd and Narcoossee Rd — 2

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	5	1.02	5	1.000		0	0	0	5			0	5	5
EB	T	0	1.02	0	1.000		0	0	0	0			0	0	
	R	12	1.02	12	1.000		0	0	0	12			0	12	12
	L	16	1.02	16	1.000		73	2	75	91		15%	5	96	16 + {75} + (5) = 96
WB	T	2	1.02	2	1.000		0	0	0	2			0	2	2
	R	44	1.02	45	1.000		45	2	47	92		25%	8	100	45 + {47} + (8) = 100
	L	42	1.02	43	1.000		0	0	0	43			0	43	43
NB	T	1389	1.02	1,417	1.000		0	36	36	1,453			0	1453	1417 + {36} = 1453
	R	63	1.02	64	1.000		125	4	129	193	15%		7	200	64 + {129} + (7) = 200
	L	96	1.02	98	1.000		76	1	77	175	25%		12	187	98 + {77} + (12) = 187
SB	T	1647	1.02	1,680	1.000		0	23	23	1,703			0	1703	1680 + {23} = 1703
	R	11	1.02	11	1.000		0	0	0	11			0	11	11

Intersection= Tenth (10th) Street and Narcoossee Rd — 3

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	171	1.02	174	1.000		16	4	20	194	5%		2	196	174 + {20} + (2) = 196
EB	T	7	1.02	7	1.000		0	0	0	7			0	7	7
	R	87	1.02	89	1.000		4	0	4	93			0	93	89 + {4} = 93
	L	20	1.02	20	1.000		0	0	0	20			0	20	20
WB	T	3	1.02	3	1.000		0	0	0	3			0	3	3
	R	25	1.02	26	1.000		0	0	0	26			0	26	26
	L	89	1.02	91	1.000		2	0	2	93			0	93	91 + {2} = 93
NB	T	1303	1.02	1,329	1.000		109	32	141	1,470	10%		5	1475	1329 + {141} + (5) = 1475
	R	69	1.02	70	1.000		0	0	0	70			0	70	70
	L	27	1.02	28	1.000		0	0	0	28			0	28	28
SB	T	1569	1.02	1,600	1.000		64	19	83	1,683		10%	3	1686	1600 + {83} + (3) = 1686
	R	86	1.02	88	1.000		9	4	13	101		5%	2	103	88 + {13} + (2) = 103

Intersection= US 192 and Narcoossee Rd / Hickory Tree Rd — 4

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	586	1.02	598	1.000		93	16	109	707	8%		4	711	598 + {109} + (4) = 711
EB	T	1019	1.02	1,039	1.000		67	0	67	1,106	37%		18	1124	1039 + {67} + (18) = 1124
	R	115	1.02	117	1.000		0	0	0	117			0	117	117
	L	129	1.02	132	1.000		14	0	14	146		3%	1	147	132 + {14} + (1) = 147
WB	T	1315	1.02	1,341	1.000		61	0	61	1,402		37%	12	1414	1341 + {61} + (12) = 1414
	R	320	1.02	326	1.000		2	10	12	338			0	338	326 + {12} = 338
	L	153	1.02	156	1.000		0	0	0	156			0	156	156
NB	T	464	1.02	473	1.000		16	6	22	495	2%		1	496	473 + {22} + (1) = 496
	R	94	1.02	96	1.000		23	0	23	119	3%		1	120	96 + {23} + (1) = 120
	L	582	1.02	594	1.000		25	5	30	624			0	624	594 + {30} = 624
SB	T	610	1.02	622	1.000		9	4	13	635		2%	0	635	622 + {13} = 635
	R	473	1.02	482	1.000		34	10	44	526		8%	3	529	482 + {44} + (3) = 529

Project No. 24028.01.01 Nona Townhomes

Intersection Volumes

Period	Tgen	Enter	Exit	SF
PM Peak	81	48	33	1.02

Legend: Existing + {Vested} + (Project) = Total

Intersection= US 192 and Old Hickory Tree Rd — 5

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	108	1.02	**110**	1.000		0	0	0	**110**			**0**	**110**	**110**
EB	T	1656	1.02	**1,689**	1.000		141	11	152	**1,841**	40%		**20**	**1861**	**1689 + {152} + (20) = 1861**
	R	116	1.02	**118**	1.000		0	0	0	**118**			**0**	**118**	**118**
	L	65	1.02	**66**	1.000		12	4	16	**82**		5%	**2**	**84**	**66 + {16} + (2) = 84**
WB	T	1644	1.02	**1,677**	1.000		83	6	89	**1,766**		40%	**13**	**1779**	**1677 + {89} + (13) = 1779**
	R	76	1.02	**78**	1.000		0	0	0	**78**			**0**	**78**	**78**
	L	121	1.02	**123**	1.000		0	0	0	**123**			**0**	**123**	**123**
NB	T	48	1.02	**49**	1.000		0	0	0	**49**			**0**	**49**	**49**
	R	75	1.02	**77**	1.000		20	5	25	**102**	5%		**2**	**104**	**77 + {25} + (2) = 104**
	L	75	1.02	**77**	1.000		0	0	0	**77**			**0**	**77**	**77**
SB	T	56	1.02	**57**	1.000		0	0	0	**57**			**0**	**57**	**57**
	R	49	1.02	**50**	1.000		0	0	0	**50**			**0**	**50**	**50**

Intersection= US 192 and Puffin Rd — 6

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L		1.02	**0**	1.000		0	0	0	**0**	40%		**19**	**19**	**(19)**
EB	T	1695	1.02	**1,729**	1.000		115	5	120	**1,849**			**0**	**1849**	**1729 + {120} = 1849**
	R		1.02	**0**	1.000		0	0	0	**0**			**0**	**0**	
	L		1.02	**0**	1.000		0	0	0	**0**			**0**	**0**	
WB	T	1764	1.02	**1,799**	1.000		77	10	87	**1,886**			**0**	**1886**	**1799 + {87} = 1886**
	R		1.02	**0**	1.000		0	0	0	**0**	20%		**10**	**10**	**(10)**
	L		1.02	**0**	1.000		0	0	0	**0**			**0**	**0**	
NB	T		1.02	**0**	1.000		0	0	0	**0**			**0**	**0**	
	R		1.02	**0**	1.000		0	0	0	**0**			**0**	**0**	
	L		1.02	**0**	1.000		0	0	0	**0**		20%	**7**	**7**	**(7)**
SB	T		1.02	**0**	1.000		0	0	0	**0**			**0**	**0**	
	R		1.02	**0**	1.000		0	0	0	**0**		40%	**13**	**13**	**(13)**

Intersection= US 192 and Nova Rd — 7

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	392	1.02	**400**	1.000		19	3	22	**422**		10%	**3**	**425**	**400 + {22} + (3) = 425**
EB	T	1004	1.02	**1,024**	1.000		24	2	26	**1,050**		10%	**4**	**1054**	**1024 + {26} + (4) = 1054**
	R	0	1.02	**0**	1.000		0	0	0	**0**			**0**	**0**	
	L	0	1.02	**0**	1.000		0	0	0	**0**			**0**	**0**	
WB	T	864	1.02	**881**	1.000		38	4	42	**923**	10%		**5**	**928**	**881 + {42} + (5) = 928**
	R	46	1.02	**47**	1.000		11	0	11	**58**			**0**	**58**	**47 + {11} = 58**
	L	0	1.02	**0**	1.000		0	0	0	**0**			**0**	**0**	
NB	T	0	1.02	**0**	1.000		0	0	0	**0**			**0**	**0**	
	R	0	1.02	**0**	1.000		0	0	0	**0**			**0**	**0**	
	L	24	1.02	**24**	1.000		6	0	6	**30**			**0**	**30**	**24 + {6} = 30**
SB	T	0	1.02	**0**	1.000		0	0	0	**0**			**0**	**0**	
	R	356	1.02	**363**	1.000		30	6	36	**399**	10%		**5**	**404**	**363 + {36} + (5) = 404**

Intersection= Lillian Lee Rd and River Crest Ave — 8

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	0	1.00	**0**	1.000		0	0	0	**0**			**0**	**0**	
EB	T	153	1.00	**153**	1.000		201	5	206	**359**			**0**	**359**	**153 + {206} = 359**
	R	27	1.00	**27**	1.000		0	0	0	**27**	40%		**19**	**46**	**27 + (19) = 46**
	L	3	1.00	**3**	1.000		0	0	0	**3**			**0**	**3**	**3**
WB	T	78	1.00	**78**	1.000		118	4	122	**200**			**0**	**200**	**78 + {122} = 200**
	R	0	1.00	**0**	1.000		0	0	0	**0**			**0**	**0**	
	L	14	1.00	**14**	1.000		0	0	0	**14**		40%	**13**	**27**	**14 + (13) = 27**
NB	T	0	1.00	**0**	1.000		0	0	0	**0**			**0**	**0**	
	R	2	1.00	**2**	1.000		0	0	0	**2**			**0**	**2**	**2**
	L	0	1.00	**0**	1.000		0	0	0	**0**			**0**	**0**	
SB	T	0	1.00	**0**	1.000		0	0	0	**0**			**0**	**0**	
	R	0	1.00	**0**	1.000		0	0	0	**0**			**0**	**0**	

Project No. 24028.01.01 Nona Townhomes

Intersection Volumes

Period	Tgen	Enter	Exit	SF	Legend
PM Peak	81	48	33	1.02	Existing + {Vested} + (Project) = Total

Intersection= Puffin Rd and Access A — 9

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	0	1.00	0	1.000		0	0	0	0			0	0	
EB	T	0	1.00	0	1.000		0	0	0	0			0	0	
	R	0	1.00	0	1.000		0	0	0	0		12%	4	4	(4)
	L	0	1.00	0	1.000		0	0	0	0			0	0	
WB	T	0	1.00	0	1.000		0	0	0	0			0	0	
	R	0	1.00	0	1.000		0	0	0	0			0	0	
	L	0	1.00	0	1.000		0	0	0	0	12%		6	6	(6)
NB	T	3	1.00	3	1.000		98	0	98	101			0	101	3 + {98} = 101
	R	0	1.00	0	1.000		0	0	0	0			0	0	
	L	0	1.00	0	1.000		0	0	0	0			0	0	
SB	T	1	1.00	1	1.000		86	0	86	87			0	87	1 + {86} = 87
	R	0	1.00	0	1.000		0	0	0	0			0	0	

Intersection= Puffin Rd and Access B — 10

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	0	1.00	0	1.000		0	0	0	0			0	0	
EB	T	0	1.00	0	1.000		0	0	0	0			0	0	
	R	0	1.00	0	1.000		0	0	0	0		12%	4	4	(4)
	L	0	1.00	0	1.000		0	0	0	0			0	0	
WB	T	0	1.00	0	1.000		0	0	0	0			0	0	
	R	0	1.00	0	1.000		0	0	0	0			0	0	
	L	0	1.00	0	1.000		0	0	0	0	12%		6	6	(6)
NB	T	3	1.00	3	1.000		98	0	98	101	12%		6	107	3 + {98} + (6) = 107
	R	0	1.00	0	1.000		0	0	0	0			0	0	
	L	0	1.00	0	1.000		0	0	0	0			0	0	
SB	T	1	1.00	1	1.000		86	0	86	87		12%	4	91	1 + {86} + (4) = 91
	R	0	1.00	0	1.000		0	0	0	0			0	0	

Intersection= Puffin Rd and Access C — 11

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	0	1.00	0	1.000		0	0	0	0			0	0	
EB	T	0	1.00	0	1.000		0	0	0	0			0	0	
	R	0	1.00	0	1.000		0	0	0	0		12%	4	4	(4)
	L	0	1.00	0	1.000		0	0	0	0			0	0	
WB	T	0	1.00	0	1.000		0	0	0	0			0	0	
	R	0	1.00	0	1.000		0	0	0	0			0	0	
	L	0	1.00	0	1.000		0	0	0	0	12%		5	5	(5)
NB	T	3	1.00	3	1.000		98	0	98	101	24%		12	113	3 + {98} + (12) = 113
	R	0	1.00	0	1.000		0	0	0	0			0	0	
	L	0	1.00	0	1.000		0	0	0	0			0	0	
SB	T	1	1.00	1	1.000		86	0	86	87		24%	8	95	1 + {86} + (8) = 95
	R	0	1.00	0	1.000		0	0	0	0			0	0	

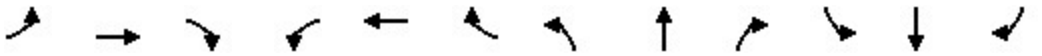
Intersection= Puffin Rd and Access D — 12

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	0	1.00	0	1.000		0	0	0	0			0	0	
EB	T	0	1.00	0	1.000		0	0	0	0			0	0	
	R	0	1.00	0	1.000		0	0	0	0		12%	4	4	(4)
	L	0	1.00	0	1.000		0	0	0	0			0	0	
WB	T	0	1.00	0	1.000		0	0	0	0			0	0	
	R	0	1.00	0	1.000		0	0	0	0			0	0	
	L	0	1.00	0	1.000		0	0	0	0	12%		6	6	(6)
NB	T	3	1.00	3	1.000		98	0	98	101	36%		17	118	3 + {98} + (17) = 118
	R	0	1.00	0	1.000		0	0	0	0			0	0	
	L	0	1.00	0	1.000		0	0	0	0			0	0	
SB	T	1	1.00	1	1.000		86	0	86	87		36%	12	99	1 + {86} + (12) = 99
	R	0	1.00	0	1.000		0	0	0	0			0	0	

Intersection= Puffin Rd and Access E — 13

Approach	Mvmt	Raw	SF	Adjusted	GR	Redirect	Vested (13)	Eden	Vested All	Adj Bg'd	%Proj Ent	%Proj Ext	Project	Total	Formula
	L	0	1.00	0	1.000		0	0	0	0			0	0	
EB	T	0	1.00	0	1.000		0	0	0	0			0	0	
	R	0	1.00	0	1.000		0	0	0	0		12%	4	4	(4)
	L	0	1.00	0	1.000		0	0	0	0			0	0	
WB	T	0	1.00	0	1.000		0	0	0	0			0	0	
	R	0	1.00	0	1.000		0	0	0	0			0	0	
	L	0	1.00	0	1.000		0	0	0	0	12%		6	6	(6)
NB	T	3	1.00	3	1.000		98	0	98	101	48%		23	124	3 + {98} + (23) = 124
	R	0	1.00	0	1.000		0	0	0	0			0	0	
	L	0	1.00	0	1.000		0	0	0	0			0	0	
SB	T	1	1.00	1	1.000		86	0	86	87		48%	16	103	1 + {86} + (16) = 103
	R	0	1.00	0	1.000		0	0	0	0			0	0	

Appendix J
HCM Analysis Worksheets & Signal Timing Data



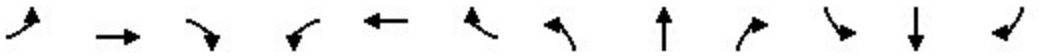
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	226	3	35	8	3	2	7	1122	28	11	976	121
Future Volume (veh/h)	226	3	35	8	3	2	7	1122	28	11	976	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1811	1707	1870	1159	1263	1826	1870	1633	1826	1856
Adj Flow Rate, veh/h	231	3	36	8	3	2	7	1145	29	11	996	123
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	6	13	2	50	43	5	2	18	5	3
Cap, veh/h	263	195	174	39	81	43	252	2535	1158	303	2287	282
Arrive On Green	0.08	0.11	0.11	0.01	0.04	0.04	0.01	0.73	0.73	0.01	0.74	0.74
Sat Flow, veh/h	3456	1777	1585	3155	1870	982	1203	3469	1585	1555	3108	384
Grp Volume(v), veh/h	231	3	36	8	3	2	7	1145	29	11	556	563
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1577	1870	982	1203	1735	1585	1555	1735	1757
Q Serve(g_s), s	14.6	0.3	4.6	0.6	0.3	0.4	0.3	29.2	1.1	0.4	27.4	27.4
Cycle Q Clear(g_c), s	14.6	0.3	4.6	0.6	0.3	0.4	0.3	29.2	1.1	0.4	27.4	27.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.22
Lane Grp Cap(c), veh/h	263	195	174	39	81	43	252	2535	1158	303	1277	1293
V/C Ratio(X)	0.88	0.02	0.21	0.21	0.04	0.05	0.03	0.45	0.03	0.04	0.44	0.44
Avail Cap(c_a), veh/h	361	352	314	338	372	195	415	2535	1158	506	1277	1293
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	100.6	87.3	89.2	107.6	100.8	100.8	9.1	11.9	8.1	9.2	11.3	11.3
Incr Delay (d2), s/veh	13.5	0.0	0.2	1.0	0.1	0.2	0.0	0.6	0.0	0.0	1.1	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.4	0.3	3.4	0.4	0.3	0.2	0.2	16.7	0.7	0.2	16.0	16.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	114.2	87.3	89.4	108.5	100.9	101.0	9.1	12.5	8.2	9.3	12.4	12.4
LnGrp LOS	F	F	F	F	F	F	A	B	A	A	B	B
Approach Vol, veh/h		270			13			1181			1130	
Approach Delay, s/veh		110.6			105.6			12.4			12.3	
Approach LOS		F			F			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.1	170.2	23.7	16.0	11.2	169.1	9.1	30.6
Change Period (Y+Rc), s	8.0	8.3	7.0	* 6.4	8.3	8.3	6.4	6.4
Max Green Setting (Gmax), s	32.0	91.7	23.0	* 44	31.7	91.7	23.6	43.6
Max Q Clear Time (g_c+I1), s	2.3	29.4	16.6	2.4	2.4	31.2	2.6	6.6
Green Ext Time (p_c), s	0.0	11.1	0.2	0.0	0.0	13.0	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	23.0
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



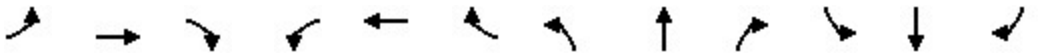
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	226	3	36	8	3	2	10	1219	28	11	1006	121
Future Volume (veh/h)	226	3	36	8	3	2	10	1219	28	11	1006	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1811	1707	1870	1159	1263	1826	1870	1633	1826	1856
Adj Flow Rate, veh/h	231	3	37	8	3	2	10	1244	29	11	1027	123
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	6	13	2	50	43	5	2	18	5	3
Cap, veh/h	263	196	174	39	82	43	246	2535	1158	274	2287	274
Arrive On Green	0.08	0.11	0.11	0.01	0.04	0.04	0.01	0.73	0.73	0.01	0.73	0.73
Sat Flow, veh/h	3456	1777	1585	3155	1870	982	1203	3469	1585	1555	3120	373
Grp Volume(v), veh/h	231	3	37	8	3	2	10	1244	29	11	571	579
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1577	1870	982	1203	1735	1585	1555	1735	1759
Q Serve(g_s), s	14.6	0.3	4.7	0.6	0.3	0.4	0.5	33.1	1.1	0.4	28.8	28.9
Cycle Q Clear(g_c), s	14.6	0.3	4.7	0.6	0.3	0.4	0.5	33.1	1.1	0.4	28.8	28.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	263	196	174	39	82	43	246	2535	1158	274	1271	1289
V/C Ratio(X)	0.88	0.02	0.21	0.21	0.04	0.05	0.04	0.49	0.03	0.04	0.45	0.45
Avail Cap(c_a), veh/h	361	352	314	338	372	195	406	2535	1158	477	1271	1289
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	100.6	87.3	89.2	107.6	100.8	100.8	9.2	12.4	8.1	9.8	11.7	11.7
Incr Delay (d2), s/veh	13.5	0.0	0.2	1.0	0.1	0.2	0.0	0.7	0.0	0.0	1.1	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.4	0.3	3.5	0.4	0.3	0.2	0.2	18.6	0.7	0.2	16.7	17.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	114.2	87.3	89.4	108.5	100.8	101.0	9.2	13.1	8.2	9.9	12.8	12.8
LnGrp LOS	F	F	F	F	F	F	A	B	A	A	B	B
Approach Vol, veh/h		271			13			1283			1161	
Approach Delay, s/veh		110.5			105.6			13.0			12.8	
Approach LOS		F			F			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.7	169.5	23.7	16.0	11.2	169.0	9.1	30.6
Change Period (Y+Rc), s	8.0	8.3	7.0	* 6.4	8.3	8.3	6.4	6.4
Max Green Setting (Gmax), s	32.0	91.7	23.0	* 44	31.7	91.7	23.6	43.6
Max Q Clear Time (g_c+I1), s	2.5	30.9	16.6	2.4	2.4	35.1	2.6	6.7
Green Ext Time (p_c), s	0.0	11.6	0.2	0.0	0.0	14.8	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	23.0
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



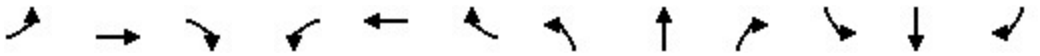
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	226	3	36	8	3	2	10	1232	28	11	1010	121
Future Volume (veh/h)	226	3	36	8	3	2	10	1232	28	11	1010	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1811	1707	1870	1159	1263	1826	1870	1633	1826	1856
Adj Flow Rate, veh/h	231	3	37	8	3	2	10	1257	29	11	1031	123
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	6	13	2	50	43	5	2	18	5	3
Cap, veh/h	263	196	174	39	82	43	245	2535	1158	270	2288	273
Arrive On Green	0.08	0.11	0.11	0.01	0.04	0.04	0.01	0.73	0.73	0.01	0.73	0.73
Sat Flow, veh/h	3456	1777	1585	3155	1870	982	1203	3469	1585	1555	3121	372
Grp Volume(v), veh/h	231	3	37	8	3	2	10	1257	29	11	573	581
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1577	1870	982	1203	1735	1585	1555	1735	1759
Q Serve(g_s), s	14.6	0.3	4.7	0.6	0.3	0.4	0.5	33.7	1.1	0.4	29.0	29.0
Cycle Q Clear(g_c), s	14.6	0.3	4.7	0.6	0.3	0.4	0.5	33.7	1.1	0.4	29.0	29.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	263	196	174	39	82	43	245	2535	1158	270	1271	1289
V/C Ratio(X)	0.88	0.02	0.21	0.21	0.04	0.05	0.04	0.50	0.03	0.04	0.45	0.45
Avail Cap(c_a), veh/h	361	352	314	338	372	195	405	2535	1158	473	1271	1289
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	100.6	87.3	89.2	107.6	100.8	100.8	9.2	12.5	8.1	9.9	11.7	11.7
Incr Delay (d2), s/veh	13.5	0.0	0.2	1.0	0.1	0.2	0.0	0.7	0.0	0.0	1.2	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.4	0.3	3.5	0.4	0.3	0.2	0.2	18.9	0.7	0.2	16.8	17.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	114.2	87.3	89.4	108.5	100.8	101.0	9.3	13.2	8.2	9.9	12.9	12.9
LnGrp LOS	F	F	F	F	F	F	A	B	A	A	B	B
Approach Vol, veh/h		271			13			1296			1165	
Approach Delay, s/veh		110.5			105.6			13.1			12.8	
Approach LOS		F			F			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.7	169.5	23.7	16.0	11.2	169.0	9.1	30.6
Change Period (Y+Rc), s	8.0	8.3	7.0	* 6.4	8.3	8.3	6.4	6.4
Max Green Setting (Gmax), s	32.0	91.7	23.0	* 44	31.7	91.7	23.6	43.6
Max Q Clear Time (g_c+I1), s	2.5	31.0	16.6	2.4	2.4	35.7	2.6	6.7
Green Ext Time (p_c), s	0.0	11.7	0.2	0.0	0.0	15.0	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	23.0
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



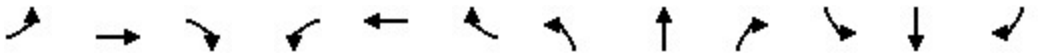
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	273	13	43	17	21	17	38	1281	21	20	1646	224
Future Volume (veh/h)	273	13	43	17	21	17	38	1281	21	20	1646	224
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1781	1752	1722	1826	1633	1737	1870	1826	1752	1856	1856
Adj Flow Rate, veh/h	276	13	43	17	21	17	38	1294	21	20	1663	226
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	8	10	12	5	18	11	2	5	10	3	3
Cap, veh/h	313	210	188	69	96	73	147	2411	1050	266	2106	280
Arrive On Green	0.09	0.12	0.12	0.02	0.05	0.05	0.03	0.68	0.68	0.02	0.67	0.67
Sat Flow, veh/h	3456	1692	1510	3182	1826	1384	1654	3554	1547	1668	3127	416
Grp Volume(v), veh/h	276	13	43	17	21	17	38	1294	21	20	923	966
Grp Sat Flow(s),veh/h/ln	1728	1692	1510	1591	1826	1384	1654	1777	1547	1668	1763	1781
Q Serve(g_s), s	15.0	1.3	4.9	1.0	2.1	2.2	1.3	35.0	0.8	0.7	68.1	73.7
Cycle Q Clear(g_c), s	15.0	1.3	4.9	1.0	2.1	2.2	1.3	35.0	0.8	0.7	68.1	73.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.23
Lane Grp Cap(c), veh/h	313	210	188	69	96	73	147	2411	1050	266	1187	1199
V/C Ratio(X)	0.88	0.06	0.23	0.24	0.22	0.23	0.26	0.54	0.02	0.08	0.78	0.81
Avail Cap(c_a), veh/h	418	299	267	395	324	245	293	2411	1050	422	1187	1199
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	85.4	73.4	75.0	91.4	86.3	86.4	25.9	15.4	9.9	12.2	21.3	22.2
Incr Delay (d2), s/veh	13.0	0.0	0.2	0.7	0.4	0.6	0.3	0.9	0.0	0.0	5.0	5.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.7	1.0	3.4	0.8	1.8	1.5	1.4	20.0	0.5	0.5	36.9	40.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	98.4	73.5	75.2	92.1	86.7	87.0	26.3	16.3	10.0	12.3	26.3	28.0
LnGrp LOS	F	E	E	F	F	F	C	B	A	B	C	C
Approach Vol, veh/h		332			55			1353			1909	
Approach Delay, s/veh		94.5			88.4			16.5			27.0	
Approach LOS		F			F			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	136.3	24.2	16.4	12.2	137.2	10.5	30.0
Change Period (Y+Rc), s	8.0	8.3	7.0	* 6.4	8.3	8.3	6.4	6.4
Max Green Setting (Gmax), s	22.0	81.7	23.0	* 34	21.7	81.7	23.6	33.6
Max Q Clear Time (g_c+I1), s	3.3	75.7	17.0	4.2	2.7	37.0	3.0	6.9
Green Ext Time (p_c), s	0.0	5.3	0.2	0.1	0.0	14.8	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	30.2
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



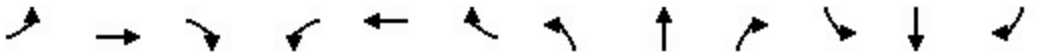
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	273	13	46	17	21	17	40	1340	21	20	1747	224
Future Volume (veh/h)	273	13	46	17	21	17	40	1340	21	20	1747	224
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1781	1752	1722	1826	1633	1737	1870	1826	1752	1856	1856
Adj Flow Rate, veh/h	276	13	46	17	21	17	40	1354	21	20	1765	226
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	8	10	12	5	18	11	2	5	10	3	3
Cap, veh/h	313	210	188	69	96	73	131	2411	1050	250	2121	266
Arrive On Green	0.09	0.12	0.12	0.02	0.05	0.05	0.03	0.68	0.68	0.02	0.67	0.67
Sat Flow, veh/h	3456	1692	1510	3182	1826	1384	1654	3554	1547	1668	3152	395
Grp Volume(v), veh/h	276	13	46	17	21	17	40	1354	21	20	970	1021
Grp Sat Flow(s),veh/h/ln	1728	1692	1510	1591	1826	1384	1654	1777	1547	1668	1763	1784
Q Serve(g_s), s	15.0	1.3	5.2	1.0	2.1	2.2	1.4	37.6	0.8	0.7	76.0	83.1
Cycle Q Clear(g_c), s	15.0	1.3	5.2	1.0	2.1	2.2	1.4	37.6	0.8	0.7	76.0	83.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.22
Lane Grp Cap(c), veh/h	313	210	188	69	96	73	131	2411	1050	250	1186	1201
V/C Ratio(X)	0.88	0.06	0.25	0.24	0.22	0.23	0.30	0.56	0.02	0.08	0.82	0.85
Avail Cap(c_a), veh/h	418	299	267	395	324	245	277	2411	1050	406	1186	1201
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	85.4	73.4	75.1	91.4	86.3	86.3	31.4	15.9	10.0	12.7	22.6	23.7
Incr Delay (d2), s/veh	13.0	0.0	0.2	0.7	0.4	0.6	0.5	1.0	0.0	0.1	6.3	7.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.7	1.0	3.7	0.8	1.8	1.5	1.8	21.3	0.5	0.5	40.9	45.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	98.4	73.5	75.4	92.1	86.7	87.0	31.9	16.8	10.0	12.8	28.9	31.4
LnGrp LOS	F	E	E	F	F	F	C	B	A	B	C	C
Approach Vol, veh/h		335			55			1415			2011	
Approach Delay, s/veh		94.3			88.4			17.1			30.0	
Approach LOS		F			F			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	136.2	24.2	16.4	12.2	137.2	10.5	30.0
Change Period (Y+Rc), s	8.0	8.3	7.0	* 6.4	8.3	8.3	6.4	6.4
Max Green Setting (Gmax), s	22.0	81.7	23.0	* 34	21.7	81.7	23.6	33.6
Max Q Clear Time (g_c+I1), s	3.4	85.1	17.0	4.2	2.7	39.6	3.0	7.2
Green Ext Time (p_c), s	0.0	0.0	0.2	0.1	0.0	15.6	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	31.7
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	273	13	46	17	21	17	40	1348	21	20	1759	224
Future Volume (veh/h)	273	13	46	17	21	17	40	1348	21	20	1759	224
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1781	1752	1722	1826	1633	1737	1870	1826	1752	1856	1856
Adj Flow Rate, veh/h	276	13	46	17	21	17	40	1362	21	20	1777	226
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	8	10	12	5	18	11	2	5	10	3	3
Cap, veh/h	313	210	188	69	96	73	130	2411	1050	248	2123	264
Arrive On Green	0.09	0.12	0.12	0.02	0.05	0.05	0.03	0.68	0.68	0.02	0.67	0.67
Sat Flow, veh/h	3456	1692	1510	3182	1826	1384	1654	3554	1547	1668	3155	393
Grp Volume(v), veh/h	276	13	46	17	21	17	40	1362	21	20	976	1027
Grp Sat Flow(s),veh/h/ln	1728	1692	1510	1591	1826	1384	1654	1777	1547	1668	1763	1785
Q Serve(g_s), s	15.0	1.3	5.2	1.0	2.1	2.2	1.4	38.0	0.8	0.7	77.0	84.2
Cycle Q Clear(g_c), s	15.0	1.3	5.2	1.0	2.1	2.2	1.4	38.0	0.8	0.7	77.0	84.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.22
Lane Grp Cap(c), veh/h	313	210	188	69	96	73	130	2411	1050	248	1186	1201
V/C Ratio(X)	0.88	0.06	0.25	0.24	0.22	0.23	0.31	0.56	0.02	0.08	0.82	0.86
Avail Cap(c_a), veh/h	418	299	267	395	324	245	275	2411	1050	404	1186	1201
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	85.4	73.4	75.1	91.4	86.3	86.3	32.1	15.9	10.0	12.8	22.8	23.9
Incr Delay (d2), s/veh	13.0	0.0	0.2	0.7	0.4	0.6	0.5	1.0	0.0	0.1	6.5	7.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.7	1.0	3.7	0.8	1.8	1.5	1.8	21.5	0.5	0.5	41.4	45.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	98.4	73.5	75.4	92.1	86.7	87.0	32.6	16.9	10.0	12.9	29.3	31.8
LnGrp LOS	F	E	E	F	F	F	C	B	A	B	C	C
Approach Vol, veh/h		335			55			1423			2023	
Approach Delay, s/veh		94.3			88.4			17.2			30.4	
Approach LOS		F			F			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	136.2	24.2	16.4	12.2	137.2	10.5	30.0
Change Period (Y+Rc), s	8.0	8.3	7.0	* 6.4	8.3	8.3	6.4	6.4
Max Green Setting (Gmax), s	22.0	81.7	23.0	* 34	21.7	81.7	23.6	33.6
Max Q Clear Time (g_c+I1), s	3.4	86.2	17.0	4.2	2.7	40.0	3.0	7.2
Green Ext Time (p_c), s	0.0	0.0	0.2	0.1	0.0	15.7	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	31.9
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	2	35	17	2	160	6	1480	36	77	1029	6
Future Vol, veh/h	11	2	35	17	2	160	6	1480	36	77	1029	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	9	2	9	6	2	2	33	4	6	2	3	17
Mvmt Flow	12	2	37	18	2	168	6	1558	38	81	1083	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2041	2857	545	2294	2841	798	1089	0	0	1596	0	0
Stage 1	1248	1248	-	1589	1589	-	-	-	-	-	-	-
Stage 2	793	1608	-	705	1252	-	-	-	-	-	-	-
Critical Hdwy	7.68	6.54	7.08	7.62	6.54	6.94	4.76	-	-	4.14	-	-
Critical Hdwy Stg 1	6.68	5.54	-	6.62	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.68	5.54	-	6.62	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4.02	3.39	3.56	4.02	3.32	2.53	-	-	2.22	-	-
Pot Cap-1 Maneuver	30	17	465	20	17	329	482	-	-	407	-	-
Stage 1	173	243	-	108	166	-	-	-	-	-	-	-
Stage 2	333	162	-	384	242	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 11	13	465	~ 14	13	329	482	-	-	407	-	-
Mov Cap-2 Maneuver	50	56	-	75	86	-	-	-	-	-	-	-
Stage 1	138	195	-	106	164	-	-	-	-	-	-	-
Stage 2	158	160	-	280	194	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	42.48	57.06	0.05	1.11
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	482	-	-	145	243	407	-	-
HCM Lane V/C Ratio	0.013	-	-	0.348	0.775	0.199	-	-
HCM Control Delay (s/veh)	12.6	-	-	42.5	57.1	16	-	-
HCM Lane LOS	B	-	-	E	F	C	-	-
HCM 95th %tile Q(veh)	0	-	-	1.4	5.7	0.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	100.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	2	35	127	2	232	6	1493	73	102	1065	6
Future Vol, veh/h	11	2	35	127	2	232	6	1493	73	102	1065	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	9	2	9	6	2	2	33	4	6	2	3	17
Mvmt Flow	12	2	37	134	2	244	6	1572	77	107	1121	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2138	3000	564	2399	2965	824	1127	0	0	1648	0	0
Stage 1	1339	1339	-	1623	1623	-	-	-	-	-	-	-
Stage 2	799	1661	-	776	1342	-	-	-	-	-	-	-
Critical Hdwy	7.68	6.54	7.08	7.62	6.54	6.94	4.76	-	-	4.14	-	-
Critical Hdwy Stg 1	6.68	5.54	-	6.62	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.68	5.54	-	6.62	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4.02	3.39	3.56	4.02	3.32	2.53	-	-	2.22	-	-
Pot Cap-1 Maneuver	25	13	452	~ 16	14	316	464	-	-	388	-	-
Stage 1	151	220	-	~ 103	160	-	-	-	-	-	-	-
Stage 2	330	153	-	348	219	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 4	10	452	~ 10	10	316	464	-	-	388	-	-
Mov Cap-2 Maneuver	~ -51	34	-	~ 67	75	-	-	-	-	-	-	-
Stage 1	110	159	-	~ 101	157	-	-	-	-	-	-	-
Stage 2	73	151	-	228	158	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v		$ 872.34	0.05	1.55
HCM LOS	-	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	464	-	-	+ 137	388	-	-	
HCM Lane V/C Ratio	0.014	-	-	- 2.782	0.277	-	-	
HCM Control Delay (s/veh)	12.9	-	-	-$ 872.3	17.8	-	-	
HCM Lane LOS	B	-	-	- F	C	-	-	
HCM 95th %tile Q(veh)	0	-	-	- 34.5	1.1	-	-	

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	116

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	2	35	135	2	245	6	1493	76	106	1065	6
Future Vol, veh/h	11	2	35	135	2	245	6	1493	76	106	1065	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	9	2	9	6	2	2	33	4	6	2	3	17
Mvmt Flow	12	2	37	142	2	258	6	1572	80	112	1121	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2147	3012	564	2409	2975	826	1127	0	0	1652	0	0
Stage 1	1347	1347	-	1624	1624	-	-	-	-	-	-	-
Stage 2	799	1664	-	785	1351	-	-	-	-	-	-	-
Critical Hdwy	7.68	6.54	7.08	7.62	6.54	6.94	4.76	-	-	4.14	-	-
Critical Hdwy Stg 1	6.68	5.54	-	6.62	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.68	5.54	-	6.62	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4.02	3.39	3.56	4.02	3.32	2.53	-	-	2.22	-	-
Pot Cap-1 Maneuver	25	13	452	~ 16	14	315	464	-	-	387	-	-
Stage 1	150	218	-	~ 103	159	-	-	-	-	-	-	-
Stage 2	330	152	-	343	217	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 3	9	452	~ 10	10	315	464	-	-	387	-	-
Mov Cap-2 Maneuver	~ -110	31	-	~ 67	74	-	-	-	-	-	-	-
Stage 1	106	155	-	~ 101	157	-	-	-	-	-	-	-
Stage 2	58	150	-	221	154	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.32	$ 959.91	0.05	1.62
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	464	-	-	1136	135	387	-	-
HCM Lane V/C Ratio	0.014	-	-	0.044	2.977	0.288	-	-
HCM Control Delay (s/veh)	12.9	-	-	8.3	$ 959.9	18	-	-
HCM Lane LOS	B	-	-	A	F	C	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	37.4	1.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	12	16	2	45	43	1417	64	98	1680	11
Future Vol, veh/h	5	0	12	16	2	45	43	1417	64	98	1680	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	25	6	2	7	2	2	3	2	2	9
Mvmt Flow	5	0	13	17	2	47	45	1476	67	102	1750	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2789	3592	881	2678	3565	771	1761	0	0	1543	0	0
Stage 1	1960	1960	-	1599	1599	-	-	-	-	-	-	-
Stage 2	829	1632	-	1079	1966	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	7.4	7.62	6.54	7.04	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.62	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.62	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.55	3.56	4.02	3.37	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	9	5	248	~ 10	6	332	351	-	-	426	-	-
Stage 1	65	108	-	106	164	-	-	-	-	-	-	-
Stage 2	331	158	-	226	107	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 5	4	248	~ 6	4	332	351	-	-	426	-	-
Mov Cap-2 Maneuver	35	24	-	50	28	-	-	-	-	-	-	-
Stage 1	50	82	-	93	143	-	-	-	-	-	-	-
Stage 2	244	138	-	163	82	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	54.98	66.44	0.47	0.88
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	351	-	-	89	120	426	-	-
HCM Lane V/C Ratio	0.128	-	-	0.198	0.547	0.239	-	-
HCM Control Delay (s/veh)	16.8	-	-	55	66.4	16.1	-	-
HCM Lane LOS	C	-	-	F	F	C	-	-
HCM 95th %tile Q(veh)	0.4	-	-	0.7	2.6	0.9	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	49.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	12	91	2	92	43	1453	193	175	1703	11
Future Vol, veh/h	5	0	12	91	2	92	43	1453	193	175	1703	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	25	6	2	7	2	2	3	2	2	9
Mvmt Flow	5	0	13	95	2	96	45	1514	201	182	1774	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2992	3948	893	2955	3854	857	1785	0	0	1715	0	0
Stage 1	2144	2144	-	1704	1704	-	-	-	-	-	-	-
Stage 2	847	1804	-	1252	2150	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	7.4	7.62	6.54	7.04	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.62	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.62	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.55	3.56	4.02	3.37	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	6	3	243	~ 6	4	291	343	-	-	366	-	-
Stage 1	50	87	-	~ 91	146	-	-	-	-	-	-	-
Stage 2	323	130	-	176	86	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 2	1	243	~ 2	~ 2	291	343	-	-	366	-	-
Mov Cap-2 Maneuver	~ 2	97	-	~ 25	~ -1	-	-	-	-	-	-	-
Stage 1	25	44	-	~ 79	127	-	-	-	-	-	-	-
Stage 2	185	113	-	~ 84	43	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	$ 1449.17	$ 850.18	0.43	2.25
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	343	-	-	8	74	366	-	-
HCM Lane V/C Ratio	0.13	-	-	2.211	2.61	0.498	-	-
HCM Control Delay (s/veh)	17.1	-	-	$ 1449.2	$ 850.2	24.2	-	-
HCM Lane LOS	C	-	-	F	F	C	-	-
HCM 95th %tile Q(veh)	0.4	-	-	3.3	18.7	2.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	101

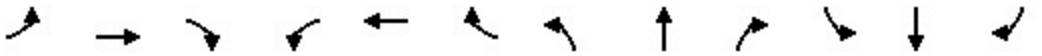
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	12	96	2	100	43	1453	200	187	1703	11
Future Vol, veh/h	5	0	12	96	2	100	43	1453	200	187	1703	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	25	6	2	7	2	2	3	2	2	9
Mvmt Flow	5	0	13	100	2	104	45	1514	208	195	1774	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3017	3981	893	2984	3882	861	1785	0	0	1722	0	0
Stage 1	2169	2169	-	1707	1707	-	-	-	-	-	-	-
Stage 2	847	1811	-	1277	2175	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	7.4	7.62	6.54	7.04	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.62	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.62	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.55	3.56	4.02	3.37	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	6	3	243	~ 6	3	289	343	-	-	363	-	-
Stage 1	48	85	-	~ 91	145	-	-	-	-	-	-	-
Stage 2	323	129	-	170	84	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 2	1	243	~ 2	~ 1	289	343	-	-	363	-	-
Mov Cap-2 Maneuver	~ -668	64	-	~ 21	~ -6	-	-	-	-	-	-	-
Stage 1	22	39	-	~ 79	126	-	-	-	-	-	-	-
Stage 2	176	112	-	~ 75	39	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	14.26	$ 1914.8	0.43	2.54
HCM LOS	B	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	343	-	-	407	43	363	-	-
HCM Lane V/C Ratio	0.13	-	-	0.044	4.833	0.536	-	-
HCM Control Delay (s/veh)	17.1	-	-	14.3	$ 1914.8	25.8	-	-
HCM Lane LOS	C	-	-	B	F	D	-	-
HCM 95th %tile Q(veh)	0.4	-	-	0.1	23.7	3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



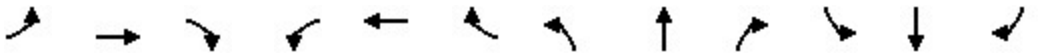
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	2	49	37	2	44	21	1386	21	9	1029	42
Future Volume (veh/h)	96	2	49	37	2	44	21	1386	21	9	1029	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1870	1841	1856	1870	1826	1693	1841	1693	1737	1856	1796
Adj Flow Rate, veh/h	101	2	52	39	2	46	22	1459	22	9	1083	44
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	8	2	4	3	2	5	14	4	14	11	3	7
Cap, veh/h	167	147	131	149	3	72	39	2638	40	22	2593	1119
Arrive On Green	0.07	0.08	0.08	0.03	0.05	0.05	0.02	0.75	0.75	0.01	0.74	0.74
Sat Flow, veh/h	1697	1777	1585	1767	66	1529	1612	3527	53	1654	3526	1522
Grp Volume(v), veh/h	101	2	52	39	0	48	22	723	758	9	1083	44
Grp Sat Flow(s),veh/h/ln	1697	1777	1585	1767	0	1595	1612	1749	1831	1654	1763	1522
Q Serve(g_s), s	11.8	0.2	6.6	4.4	0.0	6.3	2.9	37.8	37.9	1.1	25.0	1.7
Cycle Q Clear(g_c), s	11.8	0.2	6.6	4.4	0.0	6.3	2.9	37.8	37.9	1.1	25.0	1.7
Prop In Lane	1.00		1.00	1.00		0.96	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	167	147	131	149	0	75	39	1308	1370	22	2593	1119
V/C Ratio(X)	0.61	0.01	0.40	0.26	0.00	0.64	0.57	0.55	0.55	0.40	0.42	0.04
Avail Cap(c_a), veh/h	305	224	200	629	0	224	237	1308	1370	123	2593	1119
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.27	0.27	0.27	1.00	1.00	1.00
Uniform Delay (d), s/veh	87.6	89.8	92.7	92.9	0.0	99.7	102.9	11.5	11.5	104.2	10.8	7.7
Incr Delay (d2), s/veh	1.3	0.0	0.7	0.3	0.0	3.4	1.3	0.5	0.4	4.2	0.5	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.1	0.2	5.0	3.8	0.0	4.9	2.2	17.3	18.1	0.9	14.7	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	88.9	89.8	93.4	93.2	0.0	103.1	104.2	12.0	12.0	108.4	11.3	7.7
LnGrp LOS	F	F	F	F		F	F	B	B	F	B	A
Approach Vol, veh/h		155			87			1503			1136	
Approach Delay, s/veh		90.4			98.7			13.3			11.9	
Approach LOS		F			F			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	163.4	19.7	17.1	10.1	166.1	12.1	24.7
Change Period (Y+Rc), s	* 7.7	6.8	5.8	* 7.1	* 7.2	6.8	5.8	* 7.1
Max Green Setting (Gmax), s	* 31	63.2	31.2	* 30	* 16	53.2	64.2	* 27
Max Q Clear Time (g_c+I1), s	4.9	27.0	13.8	8.3	3.1	39.9	6.4	8.6
Green Ext Time (p_c), s	0.0	10.9	0.1	0.1	0.0	8.6	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	19.5
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



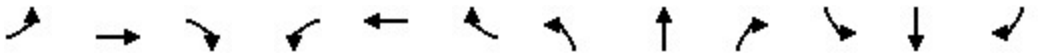
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	2	50	37	2	44	26	1428	21	9	1157	60
Future Volume (veh/h)	104	2	50	37	2	44	26	1428	21	9	1157	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1870	1841	1856	1870	1826	1693	1841	1693	1737	1856	1796
Adj Flow Rate, veh/h	109	2	53	39	2	46	27	1503	22	9	1218	63
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	8	2	4	3	2	5	14	4	14	11	3	7
Cap, veh/h	174	155	138	149	3	72	42	2624	38	22	2569	1109
Arrive On Green	0.07	0.09	0.09	0.03	0.05	0.05	0.03	0.74	0.74	0.01	0.73	0.73
Sat Flow, veh/h	1697	1777	1585	1767	66	1529	1612	3529	52	1654	3526	1522
Grp Volume(v), veh/h	109	2	53	39	0	48	27	744	781	9	1218	63
Grp Sat Flow(s),veh/h/ln	1697	1777	1585	1767	0	1595	1612	1749	1831	1654	1763	1522
Q Serve(g_s), s	12.8	0.2	6.7	4.4	0.0	6.3	3.5	40.5	40.6	1.1	30.5	2.5
Cycle Q Clear(g_c), s	12.8	0.2	6.7	4.4	0.0	6.3	3.5	40.5	40.6	1.1	30.5	2.5
Prop In Lane	1.00		1.00	1.00		0.96	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	174	155	138	149	0	75	42	1300	1362	22	2569	1109
V/C Ratio(X)	0.63	0.01	0.38	0.26	0.00	0.64	0.64	0.57	0.57	0.40	0.47	0.06
Avail Cap(c_a), veh/h	305	224	200	629	0	224	237	1300	1362	123	2569	1109
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.13	0.13	0.13	1.00	1.00	1.00
Uniform Delay (d), s/veh	87.1	88.9	91.9	92.9	0.0	99.7	102.7	12.2	12.2	104.2	12.0	8.2
Incr Delay (d2), s/veh	1.4	0.0	0.7	0.3	0.0	3.4	0.8	0.2	0.2	4.2	0.6	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.7	0.2	5.1	3.8	0.0	4.9	2.2	17.5	18.3	0.9	17.5	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	88.5	88.9	92.5	93.2	0.0	103.1	103.5	12.4	12.4	108.4	12.6	8.3
LnGrp LOS	F	F	F	F		F	F	B	B	F	B	A
Approach Vol, veh/h		164			87			1552			1290	
Approach Delay, s/veh		89.8			98.7			14.0			13.1	
Approach LOS		F			F			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	162.0	20.6	17.1	10.1	165.2	12.1	25.6
Change Period (Y+Rc), s	* 7.7	6.8	5.8	* 7.1	* 7.2	6.8	5.8	* 7.1
Max Green Setting (Gmax), s	* 31	63.2	31.2	* 30	* 16	53.2	64.2	* 27
Max Q Clear Time (g_c+I1), s	5.5	32.5	14.8	8.3	3.1	42.6	6.4	8.7
Green Ext Time (p_c), s	0.0	12.2	0.1	0.1	0.0	7.5	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	20.0
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



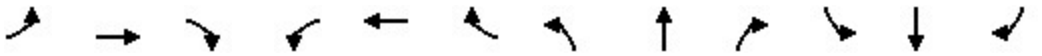
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	2	50	37	2	44	26	1430	21	9	1162	63
Future Volume (veh/h)	105	2	50	37	2	44	26	1430	21	9	1162	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1870	1841	1856	1870	1826	1693	1841	1693	1737	1856	1796
Adj Flow Rate, veh/h	111	2	53	39	2	46	27	1505	22	9	1223	66
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	8	2	4	3	2	5	14	4	14	11	3	7
Cap, veh/h	176	157	140	149	3	72	42	2620	38	22	2565	1107
Arrive On Green	0.07	0.09	0.09	0.03	0.05	0.05	0.03	0.74	0.74	0.01	0.73	0.73
Sat Flow, veh/h	1697	1777	1585	1767	66	1529	1612	3529	52	1654	3526	1522
Grp Volume(v), veh/h	111	2	53	39	0	48	27	745	782	9	1223	66
Grp Sat Flow(s),veh/h/ln	1697	1777	1585	1767	0	1595	1612	1749	1831	1654	1763	1522
Q Serve(g_s), s	13.0	0.2	6.7	4.4	0.0	6.3	3.5	40.7	40.9	1.1	30.8	2.6
Cycle Q Clear(g_c), s	13.0	0.2	6.7	4.4	0.0	6.3	3.5	40.7	40.9	1.1	30.8	2.6
Prop In Lane	1.00		1.00	1.00		0.96	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	176	157	140	149	0	75	42	1298	1360	22	2565	1107
V/C Ratio(X)	0.63	0.01	0.38	0.26	0.00	0.64	0.64	0.57	0.57	0.40	0.48	0.06
Avail Cap(c_a), veh/h	305	224	200	629	0	224	237	1298	1360	123	2565	1107
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.12	0.12	0.12	1.00	1.00	1.00
Uniform Delay (d), s/veh	87.0	88.7	91.6	92.9	0.0	99.7	102.7	12.3	12.3	104.2	12.1	8.3
Incr Delay (d2), s/veh	1.4	0.0	0.6	0.3	0.0	3.4	0.7	0.2	0.2	4.2	0.6	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.8	0.2	5.1	3.8	0.0	4.9	2.2	17.5	18.3	0.9	17.7	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	88.4	88.7	92.3	93.2	0.0	103.1	103.4	12.5	12.5	108.4	12.7	8.4
LnGrp LOS	F	F	F	F		F	F	B	B	F	B	A
Approach Vol, veh/h		166			87			1554			1298	
Approach Delay, s/veh		89.6			98.7			14.1			13.2	
Approach LOS		F			F			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	161.8	20.9	17.1	10.1	164.9	12.1	25.9
Change Period (Y+Rc), s	* 7.7	6.8	5.8	* 7.1	* 7.2	6.8	5.8	* 7.1
Max Green Setting (Gmax), s	* 31	63.2	31.2	* 30	* 16	53.2	64.2	* 27
Max Q Clear Time (g_c+I1), s	5.5	32.8	15.0	8.3	3.1	42.9	6.4	8.7
Green Ext Time (p_c), s	0.0	12.3	0.1	0.1	0.0	7.3	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	20.1
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



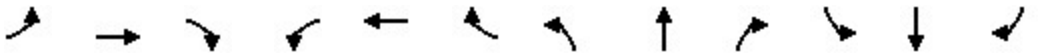
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	7	89	20	3	26	91	1329	70	28	1600	88
Future Volume (veh/h)	174	7	89	20	3	26	91	1329	70	28	1600	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1693	1856	1752	907	1781	1796	1870	1856	1841	1870	1856
Adj Flow Rate, veh/h	179	7	92	21	3	27	94	1370	72	29	1649	91
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	14	3	10	67	8	7	2	3	4	2	3
Cap, veh/h	231	208	186	131	4	34	109	2383	125	47	2326	1029
Arrive On Green	0.11	0.13	0.13	0.02	0.05	0.05	0.06	0.69	0.69	0.03	0.65	0.65
Sat Flow, veh/h	1753	1608	1434	1668	78	703	1711	3435	180	1753	3554	1572
Grp Volume(v), veh/h	179	7	92	21	0	30	94	707	735	29	1649	91
Grp Sat Flow(s),veh/h/ln	1753	1608	1434	1668	0	781	1711	1777	1838	1753	1777	1572
Q Serve(g_s), s	20.3	0.8	12.7	2.5	0.0	8.1	11.6	43.1	43.4	3.5	63.7	4.5
Cycle Q Clear(g_c), s	20.3	0.8	12.7	2.5	0.0	8.1	11.6	43.1	43.4	3.5	63.7	4.5
Prop In Lane	1.00		1.00	1.00		0.90	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	231	208	186	131	0	37	109	1233	1275	47	2326	1029
V/C Ratio(X)	0.77	0.03	0.50	0.16	0.00	0.80	0.86	0.57	0.58	0.61	0.71	0.09
Avail Cap(c_a), veh/h	304	208	186	595	0	110	251	1233	1275	130	2326	1029
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.10	0.10	0.10	1.00	1.00	1.00
Uniform Delay (d), s/veh	83.5	81.1	86.2	93.1	0.0	100.4	98.8	16.6	16.6	102.5	23.7	13.5
Incr Delay (d2), s/veh	6.1	0.0	0.8	0.2	0.0	13.8	0.8	0.2	0.2	4.7	1.9	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	14.8	0.6	8.4	2.0	0.0	3.3	6.4	19.4	20.1	3.0	35.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	89.7	81.1	87.0	93.3	0.0	114.2	99.6	16.8	16.8	107.2	25.6	13.7
LnGrp LOS	F	F	F	F		F	F	B	B	F	C	B
Approach Vol, veh/h		278			51			1536			1769	
Approach Delay, s/veh		88.6			105.6			21.9			26.3	
Approach LOS		F			F			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.3	146.2	28.2	17.3	12.9	154.6	10.8	34.7
Change Period (Y+Rc), s	* 7.7	6.8	5.8	* 7.1	* 7.2	6.8	5.8	* 7.1
Max Green Setting (Gmax), s	* 31	63.2	31.2	* 30	* 16	53.2	64.2	* 27
Max Q Clear Time (g_c+I1), s	13.6	65.7	22.3	10.1	5.5	45.4	4.5	14.7
Green Ext Time (p_c), s	0.1	0.0	0.1	0.1	0.0	5.5	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	30.3
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



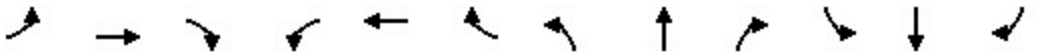
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	7	93	20	3	26	93	1470	70	28	1683	101
Future Volume (veh/h)	194	7	93	20	3	26	93	1470	70	28	1683	101
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1693	1856	1752	907	1781	1796	1870	1856	1841	1870	1856
Adj Flow Rate, veh/h	200	7	96	21	3	27	96	1515	72	29	1735	104
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	14	3	10	67	8	7	2	3	4	2	3
Cap, veh/h	251	226	202	131	4	34	111	2358	112	47	2283	1010
Arrive On Green	0.12	0.14	0.14	0.02	0.05	0.05	0.07	0.68	0.68	0.03	0.64	0.64
Sat Flow, veh/h	1753	1608	1434	1668	78	703	1711	3454	164	1753	3554	1572
Grp Volume(v), veh/h	200	7	96	21	0	30	96	777	810	29	1735	104
Grp Sat Flow(s),veh/h/ln	1753	1608	1434	1668	0	781	1711	1777	1841	1753	1777	1572
Q Serve(g_s), s	22.7	0.8	13.1	2.5	0.0	8.1	11.8	52.5	53.1	3.5	72.7	5.4
Cycle Q Clear(g_c), s	22.7	0.8	13.1	2.5	0.0	8.1	11.8	52.5	53.1	3.5	72.7	5.4
Prop In Lane	1.00		1.00	1.00		0.90	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	251	226	202	131	0	37	111	1213	1257	47	2283	1010
V/C Ratio(X)	0.80	0.03	0.48	0.16	0.00	0.80	0.86	0.64	0.64	0.61	0.76	0.10
Avail Cap(c_a), veh/h	304	226	202	594	0	110	251	1213	1257	130	2283	1010
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	82.4	79.0	84.3	93.1	0.0	100.4	98.6	19.1	19.1	102.5	26.6	14.6
Incr Delay (d2), s/veh	9.5	0.0	0.6	0.2	0.0	13.8	0.7	0.2	0.2	4.7	2.4	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	16.5	0.6	8.6	2.0	0.0	3.3	6.4	23.3	24.4	3.0	39.7	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	91.9	79.0	84.9	93.3	0.0	114.2	99.4	19.3	19.4	107.2	29.1	14.8
LnGrp LOS	F	E	F	F		F	F	B	B	F	C	B
Approach Vol, veh/h		303			51			1683			1868	
Approach Delay, s/veh		89.4			105.6			23.9			29.5	
Approach LOS		F			F			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.5	143.6	30.6	17.3	12.9	152.2	10.8	37.1
Change Period (Y+Rc), s	* 7.7	6.8	5.8	* 7.1	* 7.2	6.8	5.8	* 7.1
Max Green Setting (Gmax), s	* 31	63.2	31.2	* 30	* 16	53.2	64.2	* 27
Max Q Clear Time (g_c+I1), s	13.8	74.7	24.7	10.1	5.5	55.1	4.5	15.1
Green Ext Time (p_c), s	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	32.7
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	196	7	93	20	3	26	93	1475	70	28	1686	103
Future Volume (veh/h)	196	7	93	20	3	26	93	1475	70	28	1686	103
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1693	1856	1752	907	1781	1796	1870	1856	1841	1870	1856
Adj Flow Rate, veh/h	202	7	96	21	3	27	96	1521	72	29	1738	106
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	14	3	10	67	8	7	2	3	4	2	3
Cap, veh/h	253	228	203	131	4	34	111	2355	111	47	2279	1008
Arrive On Green	0.12	0.14	0.14	0.02	0.05	0.05	0.07	0.68	0.68	0.03	0.64	0.64
Sat Flow, veh/h	1753	1608	1434	1668	78	703	1711	3455	163	1753	3554	1572
Grp Volume(v), veh/h	202	7	96	21	0	30	96	780	813	29	1738	106
Grp Sat Flow(s),veh/h/ln	1753	1608	1434	1668	0	781	1711	1777	1841	1753	1777	1572
Q Serve(g_s), s	22.9	0.8	13.1	2.5	0.0	8.1	11.8	53.0	53.6	3.5	73.1	5.5
Cycle Q Clear(g_c), s	22.9	0.8	13.1	2.5	0.0	8.1	11.8	53.0	53.6	3.5	73.1	5.5
Prop In Lane	1.00		1.00	1.00		0.90	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	253	228	203	131	0	37	111	1211	1255	47	2279	1008
V/C Ratio(X)	0.80	0.03	0.47	0.16	0.00	0.80	0.86	0.64	0.65	0.61	0.76	0.11
Avail Cap(c_a), veh/h	304	228	203	594	0	110	251	1211	1255	130	2279	1008
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	82.3	78.8	84.1	93.1	0.0	100.4	98.6	19.2	19.3	102.5	26.8	14.7
Incr Delay (d2), s/veh	9.8	0.0	0.6	0.2	0.0	13.8	0.7	0.2	0.2	4.7	2.5	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	16.7	0.6	8.6	2.0	0.0	3.3	6.4	23.6	24.7	3.0	40.0	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	92.1	78.8	84.7	93.3	0.0	114.2	99.4	19.5	19.6	107.2	29.3	14.9
LnGrp LOS	F	E	F	F		F	F	B	B	F	C	B
Approach Vol, veh/h		305			51			1689			1873	
Approach Delay, s/veh		89.5			105.6			24.1			29.7	
Approach LOS		F			F			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.5	143.4	30.8	17.3	12.9	152.0	10.8	37.3
Change Period (Y+Rc), s	* 7.7	6.8	5.8	* 7.1	* 7.2	6.8	5.8	* 7.1
Max Green Setting (Gmax), s	* 31	63.2	31.2	* 30	* 16	53.2	64.2	* 27
Max Q Clear Time (g_c+I1), s	13.8	75.1	24.9	10.1	5.5	55.6	4.5	15.1
Green Ext Time (p_c), s	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	32.9
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	596	847	108	188	1288	284	150	392	78	440	211	427
Future Volume (veh/h)	596	847	108	188	1288	284	150	392	78	440	211	427
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1826	1826	1856	1841	1826	1856	1737	1737	1841	1841	1856
Adj Flow Rate, veh/h	614	873	111	194	1328	293	155	404	80	454	218	440
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	5	5	3	4	5	3	11	11	4	4	3
Cap, veh/h	521	1707	530	213	1551	478	172	424	359	490	541	462
Arrive On Green	0.05	0.11	0.11	0.12	0.31	0.31	0.10	0.24	0.24	0.14	0.29	0.29
Sat Flow, veh/h	3428	4985	1547	1767	5025	1547	1767	1737	1472	3401	1841	1572
Grp Volume(v), veh/h	614	873	111	194	1328	293	155	404	80	454	218	440
Grp Sat Flow(s),veh/h/ln	1714	1662	1547	1767	1675	1547	1767	1737	1472	1700	1841	1572
Q Serve(g_s), s	31.9	34.6	13.7	22.8	52.2	33.9	18.2	48.1	9.1	27.7	19.9	57.6
Cycle Q Clear(g_c), s	31.9	34.6	13.7	22.8	52.2	33.9	18.2	48.1	9.1	27.7	19.9	57.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	521	1707	530	213	1551	478	172	424	359	490	541	462
V/C Ratio(X)	1.18	0.51	0.21	0.91	0.86	0.61	0.90	0.95	0.22	0.93	0.40	0.95
Avail Cap(c_a), veh/h	521	1707	530	323	1551	478	261	448	380	523	541	462
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.95	0.71	0.71	0.71	1.00	1.00	1.00	0.92	0.92	0.92
Uniform Delay (d), s/veh	99.7	76.6	67.3	91.2	68.2	61.9	93.7	78.2	63.5	88.8	59.4	72.7
Incr Delay (d2), s/veh	98.3	1.0	0.9	17.5	4.6	4.1	22.6	30.3	0.4	21.0	0.3	28.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	31.8	22.1	9.7	16.1	29.2	19.0	14.5	33.1	6.2	19.4	14.2	34.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	198.0	77.6	68.2	108.8	72.8	66.1	116.3	108.5	63.8	109.8	59.7	101.1
LnGrp LOS	F	E	E	F	E	E	F	F	E	F	E	F
Approach Vol, veh/h		1598			1815			639			1112	
Approach Delay, s/veh		123.2			75.6			104.8			96.5	
Approach LOS		F			E			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	41.0	72.0	38.9	58.0	33.9	79.1	28.5	68.5
Change Period (Y+Rc), s	9.1	7.2	* 8.7	6.8	8.6	* 7.2	8.0	6.8
Max Green Setting (Gmax), s	31.9	59.8	* 32	54.2	38.4	* 54	31.0	56.2
Max Q Clear Time (g_c+I1), s	33.9	54.2	29.7	50.1	24.8	36.6	20.2	59.6
Green Ext Time (p_c), s	0.0	4.0	0.6	1.1	0.5	5.4	0.3	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	98.4
HCM 7th LOS	F

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	628	870	108	210	1388	292	150	399	85	481	242	484
Future Volume (veh/h)	628	870	108	210	1388	292	150	399	85	481	242	484
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1826	1826	1856	1841	1826	1856	1737	1737	1841	1841	1856
Adj Flow Rate, veh/h	647	897	111	216	1431	301	155	411	88	496	249	499
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	5	5	3	4	5	3	11	11	4	4	3
Cap, veh/h	521	1580	490	235	1485	457	172	430	364	523	565	483
Arrive On Green	0.05	0.10	0.10	0.13	0.30	0.30	0.10	0.25	0.25	0.15	0.31	0.31
Sat Flow, veh/h	3428	4985	1547	1767	5025	1547	1767	1737	1472	3401	1841	1572
Grp Volume(v), veh/h	647	897	111	216	1431	301	155	411	88	496	249	499
Grp Sat Flow(s),veh/h/ln	1714	1662	1547	1767	1675	1547	1767	1737	1472	1700	1841	1572
Q Serve(g_s), s	31.9	36.0	13.8	25.4	58.9	35.7	18.2	49.0	10.0	30.3	22.8	64.5
Cycle Q Clear(g_c), s	31.9	36.0	13.8	25.4	58.9	35.7	18.2	49.0	10.0	30.3	22.8	64.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	521	1580	490	235	1485	457	172	430	364	523	565	483
V/C Ratio(X)	1.24	0.57	0.23	0.92	0.96	0.66	0.90	0.96	0.24	0.95	0.44	1.03
Avail Cap(c_a), veh/h	521	1580	490	323	1485	457	261	448	380	523	565	483
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94	0.68	0.68	0.68	1.00	1.00	1.00	0.88	0.88	0.88
Uniform Delay (d), s/veh	99.7	80.3	70.4	90.0	72.9	64.7	93.7	77.9	63.3	88.0	58.3	72.8
Incr Delay (d2), s/veh	123.7	1.4	1.0	19.8	12.4	5.0	22.6	31.2	0.4	24.8	0.4	47.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	34.9	22.9	9.8	17.6	33.6	19.8	14.5	33.7	6.9	21.1	15.7	41.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	223.5	81.7	71.4	109.7	85.3	69.7	116.3	109.1	63.7	112.8	58.7	120.2
LnGrp LOS	F	F	E	F	F	E	F	F	E	F	E	F
Approach Vol, veh/h		1655			1948			654			1244	
Approach Delay, s/veh		136.4			85.6			104.7			104.9	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	41.0	69.3	41.0	58.7	36.5	73.8	28.5	71.3
Change Period (Y+Rc), s	9.1	7.2	* 8.7	6.8	8.6	* 7.2	8.0	6.8
Max Green Setting (Gmax), s	31.9	59.8	* 32	54.2	38.4	* 54	31.0	56.2
Max Q Clear Time (g_c+I1), s	33.9	60.9	32.3	51.0	27.4	38.0	20.2	66.5
Green Ext Time (p_c), s	0.0	0.0	0.0	0.9	0.5	5.4	0.3	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	107.5
HCM 7th LOS	F

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	629	876	108	211	1407	292	150	400	86	481	243	488
Future Volume (veh/h)	629	876	108	211	1407	292	150	400	86	481	243	488
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1826	1826	1856	1841	1826	1856	1737	1737	1841	1841	1856
Adj Flow Rate, veh/h	648	903	111	218	1451	301	155	412	89	496	251	503
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	5	5	3	4	5	3	11	11	4	4	3
Cap, veh/h	521	1572	488	237	1483	457	172	430	365	523	566	483
Arrive On Green	0.05	0.10	0.10	0.13	0.30	0.30	0.10	0.25	0.25	0.15	0.31	0.31
Sat Flow, veh/h	3428	4985	1547	1767	5025	1547	1767	1737	1472	3401	1841	1572
Grp Volume(v), veh/h	648	903	111	218	1451	301	155	412	89	496	251	503
Grp Sat Flow(s),veh/h/ln	1714	1662	1547	1767	1675	1547	1767	1737	1472	1700	1841	1572
Q Serve(g_s), s	31.9	36.2	13.8	25.6	60.1	35.8	18.2	49.1	10.2	30.3	23.0	64.6
Cycle Q Clear(g_c), s	31.9	36.2	13.8	25.6	60.1	35.8	18.2	49.1	10.2	30.3	23.0	64.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	521	1572	488	237	1483	457	172	430	365	523	566	483
V/C Ratio(X)	1.24	0.57	0.23	0.92	0.98	0.66	0.90	0.96	0.24	0.95	0.44	1.04
Avail Cap(c_a), veh/h	521	1572	488	323	1483	457	261	448	380	523	566	483
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94	0.52	0.52	0.52	1.00	1.00	1.00	0.88	0.88	0.88
Uniform Delay (d), s/veh	99.7	80.6	70.6	89.8	73.4	64.8	93.7	77.9	63.2	88.0	58.3	72.7
Incr Delay (d2), s/veh	124.5	1.4	1.0	16.4	12.5	3.9	22.6	31.3	0.4	24.8	0.4	49.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	35.0	23.0	9.8	16.9	33.3	19.0	14.5	33.8	6.9	21.1	15.8	42.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	224.3	82.1	71.6	106.2	85.9	68.6	116.3	109.2	63.6	112.8	58.7	122.1
LnGrp LOS	F	F	E	F	F	E	F	F	E	F	E	F
Approach Vol, veh/h		1662			1970			656			1250	
Approach Delay, s/veh		136.8			85.5			104.7			105.7	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	41.0	69.2	41.0	58.8	36.7	73.4	28.5	71.4
Change Period (Y+Rc), s	9.1	7.2	* 8.7	6.8	8.6	* 7.2	8.0	6.8
Max Green Setting (Gmax), s	31.9	59.8	* 32	54.2	38.4	* 54	31.0	56.2
Max Q Clear Time (g_c+I1), s	33.9	62.1	32.3	51.1	27.6	38.2	20.2	66.6
Green Ext Time (p_c), s	0.0	0.0	0.0	0.9	0.5	5.4	0.3	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	107.7
HCM 7th LOS	F

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	598	1039	117	132	1341	326	156	473	96	594	622	482
Future Volume (veh/h)	598	1039	117	132	1341	326	156	473	96	594	622	482
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1856	1870	1870	1870	1870	1856	1870	1870	1841	1870
Adj Flow Rate, veh/h	604	1049	118	133	1355	329	158	478	97	600	628	487
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	3	2	2	2	2	3	2	2	4	2
Cap, veh/h	644	2035	627	152	1507	468	176	338	288	640	500	431
Arrive On Green	0.19	0.40	0.40	0.09	0.30	0.30	0.10	0.18	0.18	0.19	0.27	0.27
Sat Flow, veh/h	3456	5106	1572	1781	5106	1585	1781	1856	1585	3456	1841	1585
Grp Volume(v), veh/h	604	1049	118	133	1355	329	158	478	97	600	628	487
Grp Sat Flow(s),veh/h/ln	1728	1702	1572	1781	1702	1585	1781	1856	1585	1728	1841	1585
Q Serve(g_s), s	36.2	32.7	10.2	15.5	53.5	38.8	18.4	38.2	11.2	35.9	57.1	57.1
Cycle Q Clear(g_c), s	36.2	32.7	10.2	15.5	53.5	38.8	18.4	38.2	11.2	35.9	57.1	57.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	644	2035	627	152	1507	468	176	338	288	640	500	431
V/C Ratio(X)	0.94	0.52	0.19	0.88	0.90	0.70	0.90	1.42	0.34	0.94	1.25	1.13
Avail Cap(c_a), veh/h	673	2035	627	360	1507	468	271	338	288	680	500	431
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.76	0.76	0.76	0.76	0.76	1.00	1.00	1.00	0.64	0.64	0.64
Uniform Delay (d), s/veh	84.3	47.8	41.1	94.9	71.0	65.8	93.6	85.9	74.9	84.3	76.5	76.5
Incr Delay (d2), s/veh	17.2	0.7	0.5	13.3	7.0	6.6	21.5	203.9	0.8	14.6	125.1	76.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	23.5	19.2	7.0	11.7	30.9	22.2	14.6	55.5	8.2	22.7	60.6	42.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	101.4	48.5	41.6	108.3	78.0	72.4	115.1	289.8	75.7	99.0	201.5	152.8
LnGrp LOS	F	D	D	F	E	E	F	F	E	F	F	F
Approach Vol, veh/h		1771			1817			733			1715	
Approach Delay, s/veh		66.1			79.2			223.8			151.8	
Approach LOS		E			E			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	48.2	69.2	47.6	45.0	26.5	90.9	28.7	63.9
Change Period (Y+Rc), s	9.1	7.2	* 8.7	6.8	8.6	* 7.2	8.0	6.8
Max Green Setting (Gmax), s	40.9	57.8	* 41	38.2	42.4	* 57	32.0	48.2
Max Q Clear Time (g_c+I1), s	38.2	55.5	37.9	40.2	17.5	34.7	20.4	59.1
Green Ext Time (p_c), s	0.9	1.8	1.0	0.0	0.4	7.3	0.3	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	113.6
HCM 7th LOS	F

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	707	1106	117	146	1402	338	156	495	119	624	635	526
Future Volume (veh/h)	707	1106	117	146	1402	338	156	495	119	624	635	526
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1856	1870	1870	1870	1870	1856	1870	1870	1841	1870
Adj Flow Rate, veh/h	714	1117	118	147	1416	341	158	500	120	630	641	531
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	3	2	2	2	2	3	2	2	4	2
Cap, veh/h	673	1960	604	166	1429	444	176	338	288	664	513	442
Arrive On Green	0.19	0.38	0.38	0.09	0.28	0.28	0.10	0.18	0.18	0.19	0.28	0.28
Sat Flow, veh/h	3456	5106	1572	1781	5106	1585	1781	1856	1585	3456	1841	1585
Grp Volume(v), veh/h	714	1117	118	147	1416	341	158	500	120	630	641	531
Grp Sat Flow(s),veh/h/ln	1728	1702	1572	1781	1702	1585	1781	1856	1585	1728	1841	1585
Q Serve(g_s), s	40.9	36.2	10.5	17.1	58.0	41.5	18.4	38.2	14.1	37.8	58.5	58.5
Cycle Q Clear(g_c), s	40.9	36.2	10.5	17.1	58.0	41.5	18.4	38.2	14.1	37.8	58.5	58.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	673	1960	604	166	1429	444	176	338	288	664	513	442
V/C Ratio(X)	1.06	0.57	0.20	0.88	0.99	0.77	0.90	1.48	0.42	0.95	1.25	1.20
Avail Cap(c_a), veh/h	673	1960	604	360	1429	444	271	338	288	680	513	442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.68	0.68	0.68	0.72	0.72	0.72	1.00	1.00	1.00	0.57	0.57	0.57
Uniform Delay (d), s/veh	84.6	51.0	43.1	94.1	75.3	69.4	93.6	85.9	76.0	83.8	75.7	75.7
Incr Delay (d2), s/veh	46.2	0.8	0.5	12.6	18.1	8.9	21.5	231.9	1.2	15.4	121.6	103.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	29.8	20.8	7.0	12.5	34.7	23.7	14.6	59.8	9.8	23.5	60.8	49.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	130.7	51.9	43.6	106.7	93.5	78.3	115.1	317.8	77.2	99.3	197.4	179.0
LnGrp LOS	F	D	D	F	F	E	F	F	E	F	F	F
Approach Vol, veh/h		1949			1904			778			1802	
Approach Delay, s/veh		80.3			91.8			239.5			157.7	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	50.0	66.0	49.0	45.0	28.2	87.8	28.7	65.3
Change Period (Y+Rc), s	9.1	7.2	* 8.7	6.8	8.6	* 7.2	8.0	6.8
Max Green Setting (Gmax), s	40.9	57.8	* 41	38.2	42.4	* 57	32.0	48.2
Max Q Clear Time (g_c+I1), s	42.9	60.0	39.8	40.2	19.1	38.2	20.4	60.5
Green Ext Time (p_c), s	0.0	0.0	0.5	0.0	0.5	7.3	0.3	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	124.6
HCM 7th LOS	F

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	711	1124	117	147	1414	338	156	496	120	624	635	529
Future Volume (veh/h)	711	1124	117	147	1414	338	156	496	120	624	635	529
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1856	1870	1870	1870	1870	1856	1870	1870	1841	1870
Adj Flow Rate, veh/h	718	1135	118	148	1428	341	158	501	121	630	641	534
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	3	2	2	2	2	3	2	2	4	2
Cap, veh/h	673	1957	603	167	1429	444	176	338	288	664	513	442
Arrive On Green	0.19	0.38	0.38	0.09	0.28	0.28	0.10	0.18	0.18	0.19	0.28	0.28
Sat Flow, veh/h	3456	5106	1572	1781	5106	1585	1781	1856	1585	3456	1841	1585
Grp Volume(v), veh/h	718	1135	118	148	1428	341	158	501	121	630	641	534
Grp Sat Flow(s),veh/h/ln	1728	1702	1572	1781	1702	1585	1781	1856	1585	1728	1841	1585
Q Serve(g_s), s	40.9	37.0	10.5	17.2	58.7	41.5	18.4	38.2	14.2	37.8	58.5	58.5
Cycle Q Clear(g_c), s	40.9	37.0	10.5	17.2	58.7	41.5	18.4	38.2	14.2	37.8	58.5	58.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	673	1957	603	167	1429	444	176	338	288	664	513	442
V/C Ratio(X)	1.07	0.58	0.20	0.89	1.00	0.77	0.90	1.48	0.42	0.95	1.25	1.21
Avail Cap(c_a), veh/h	673	1957	603	360	1429	444	271	338	288	680	513	442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.67	0.67	0.67	0.48	0.48	0.48	1.00	1.00	1.00	0.56	0.56	0.56
Uniform Delay (d), s/veh	84.6	51.4	43.2	94.0	75.6	69.4	93.6	85.9	76.1	83.8	75.7	75.7
Incr Delay (d2), s/veh	48.0	0.8	0.5	8.9	16.3	6.1	21.5	233.2	1.2	15.2	121.5	105.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	30.0	21.2	7.0	11.6	33.4	22.2	14.6	60.0	9.9	23.4	60.7	49.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	132.5	52.2	43.7	102.9	91.9	75.5	115.1	319.1	77.3	99.1	197.2	181.6
LnGrp LOS	F	D	D	F	F	E	F	F	E	F	F	F
Approach Vol, veh/h		1971			1917			780			1805	
Approach Delay, s/veh		81.0			89.8			240.3			158.3	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	50.0	66.0	49.0	45.0	28.3	87.7	28.7	65.3
Change Period (Y+Rc), s	9.1	7.2	* 8.7	6.8	8.6	* 7.2	8.0	6.8
Max Green Setting (Gmax), s	40.9	57.8	* 41	38.2	42.4	* 57	32.0	48.2
Max Q Clear Time (g_c+I1), s	42.9	60.7	39.8	40.2	19.2	39.0	20.4	60.5
Green Ext Time (p_c), s	0.0	0.0	0.5	0.0	0.5	7.2	0.3	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	124.4
HCM 7th LOS	F

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	1022	65	49	1560	63	123	52	57	58	38	58
Future Volume (veh/h)	64	1022	65	49	1560	63	123	52	57	58	38	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1841	1826	1781	1841	1856	1841	1811	1796	1796	1663	1796
Adj Flow Rate, veh/h	65	1043	66	50	1592	64	126	53	58	59	39	59
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	6	4	5	8	4	3	4	6	7	7	16	7
Cap, veh/h	80	3251	1001	63	3151	127	274	363	305	96	46	128
Arrive On Green	0.05	0.65	0.65	0.02	0.43	0.43	0.07	0.20	0.20	0.08	0.08	0.08
Sat Flow, veh/h	1725	5025	1547	1697	4956	199	1753	1811	1522	809	543	1522
Grp Volume(v), veh/h	65	1043	66	50	1076	580	126	53	58	98	0	59
Grp Sat Flow(s),veh/h/ln	1725	1675	1547	1697	1675	1805	1753	1811	1522	1352	0	1522
Q Serve(g_s), s	7.8	19.4	3.3	6.2	49.3	49.4	13.5	5.1	6.7	14.9	0.0	7.8
Cycle Q Clear(g_c), s	7.8	19.4	3.3	6.2	49.3	49.4	13.5	5.1	6.7	15.0	0.0	7.8
Prop In Lane	1.00		1.00	1.00		0.11	1.00		1.00	0.60		1.00
Lane Grp Cap(c), veh/h	80	3251	1001	63	2130	1148	274	363	305	142	0	128
V/C Ratio(X)	0.81	0.32	0.07	0.79	0.51	0.51	0.46	0.15	0.19	0.69	0.00	0.46
Avail Cap(c_a), veh/h	255	3251	1001	214	2130	1148	363	538	452	300	0	307
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.41	0.41	0.41	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	99.2	16.5	13.7	101.6	36.1	36.1	78.2	69.2	69.8	94.9	0.0	91.6
Incr Delay (d2), s/veh	17.5	0.3	0.1	9.0	0.4	0.7	1.2	0.2	0.3	5.9	0.0	2.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.0	11.9	2.2	4.7	26.2	28.1	10.3	4.3	4.7	9.4	0.0	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	116.7	16.8	13.8	110.6	36.5	36.8	79.4	69.4	70.1	100.8	0.0	94.1
LnGrp LOS	F	B	B	F	D	D	E	E	E	F		F
Approach Vol, veh/h		1174			1706			237			157	
Approach Delay, s/veh		22.1			38.7			74.9			98.3	
Approach LOS		C			D			E			F	

Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	16.3	143.1	24.3	26.3	18.6	140.7		50.6				
Change Period (Y+Rc), s	8.5	7.2	8.6	8.6	8.9	* 7.2		8.6				
Max Green Setting (Gmax), s	26.5	81.8	26.4	42.4	31.1	* 77		62.4				
Max Q Clear Time (g_c+I1), s	18.2	21.4	15.5	17.0	9.8	51.4		8.7				
Green Ext Time (p_c), s	0.1	8.4	0.2	0.7	0.1	12.0		0.4				

Intersection Summary	
HCM 7th Control Delay, s/veh	38.3
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



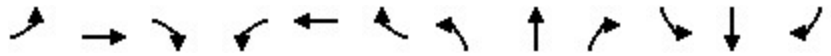
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	1070	65	73	1703	63	123	52	64	58	38	58
Future Volume (veh/h)	64	1070	65	73	1703	63	123	52	64	58	38	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1841	1826	1781	1841	1856	1841	1811	1796	1796	1663	1796
Adj Flow Rate, veh/h	65	1092	66	74	1738	64	126	53	65	59	39	59
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	6	4	5	8	4	3	4	6	7	7	16	7
Cap, veh/h	80	3173	977	89	3163	116	274	363	305	96	46	128
Arrive On Green	0.05	0.63	0.63	0.04	0.43	0.43	0.07	0.20	0.20	0.08	0.08	0.08
Sat Flow, veh/h	1725	5025	1547	1697	4975	183	1753	1811	1522	809	543	1522
Grp Volume(v), veh/h	65	1092	66	74	1170	632	126	53	65	98	0	59
Grp Sat Flow(s),veh/h/ln	1725	1675	1547	1697	1675	1808	1753	1811	1522	1352	0	1522
Q Serve(g_s), s	7.8	21.5	3.4	9.1	55.0	55.0	13.5	5.1	7.5	14.9	0.0	7.8
Cycle Q Clear(g_c), s	7.8	21.5	3.4	9.1	55.0	55.0	13.5	5.1	7.5	15.0	0.0	7.8
Prop In Lane	1.00		1.00	1.00		0.10	1.00		1.00	0.60		1.00
Lane Grp Cap(c), veh/h	80	3173	977	89	2130	1149	274	363	305	142	0	128
V/C Ratio(X)	0.81	0.34	0.07	0.83	0.55	0.55	0.46	0.15	0.21	0.69	0.00	0.46
Avail Cap(c_a), veh/h	255	3173	977	214	2130	1149	363	538	452	300	0	307
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.28	0.28	0.28	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	99.2	18.2	14.9	100.3	37.7	37.7	78.2	69.2	70.2	94.9	0.0	91.6
Incr Delay (d2), s/veh	17.5	0.3	0.1	5.5	0.3	0.5	1.2	0.2	0.3	5.9	0.0	2.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.0	13.1	2.3	6.0	28.0	30.1	10.3	4.3	5.3	9.4	0.0	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	116.7	18.5	15.0	105.8	38.0	38.3	79.4	69.4	70.5	100.8	0.0	94.1
LnGrp LOS	F	B	B	F	D	D	E	E	E	F		F
Approach Vol, veh/h		1223			1876			244			157	
Approach Delay, s/veh		23.6			40.8			74.8			98.3	
Approach LOS		C			D			E			F	

Timer - Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	19.6	139.8	24.3	26.3	18.6	140.7		50.6
Change Period (Y+Rc), s	8.5	7.2	8.6	8.6	8.9	* 7.2		8.6
Max Green Setting (Gmax), s	26.5	81.8	26.4	42.4	31.1	* 77		62.4
Max Q Clear Time (g_c+I1), s	11.1	23.5	15.5	17.0	9.8	57.0		9.5
Green Ext Time (p_c), s	0.1	9.0	0.2	0.7	0.1	11.6		0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	39.7
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



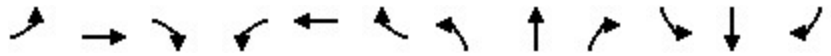
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	1076	65	76	1723	63	123	52	65	58	38	58
Future Volume (veh/h)	64	1076	65	76	1723	63	123	52	65	58	38	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1841	1826	1781	1841	1856	1841	1811	1796	1796	1663	1796
Adj Flow Rate, veh/h	65	1098	66	78	1758	64	126	53	66	59	39	59
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	6	4	5	8	4	3	4	6	7	7	16	7
Cap, veh/h	80	3160	973	94	3165	115	274	363	305	96	46	128
Arrive On Green	0.05	0.63	0.63	0.04	0.43	0.43	0.07	0.20	0.20	0.08	0.08	0.08
Sat Flow, veh/h	1725	5025	1547	1697	4977	181	1753	1811	1522	809	543	1522
Grp Volume(v), veh/h	65	1098	66	78	1183	639	126	53	66	98	0	59
Grp Sat Flow(s),veh/h/ln	1725	1675	1547	1697	1675	1808	1753	1811	1522	1352	0	1522
Q Serve(g_s), s	7.8	21.8	3.5	9.6	55.7	55.8	13.5	5.1	7.6	14.9	0.0	7.8
Cycle Q Clear(g_c), s	7.8	21.8	3.5	9.6	55.7	55.8	13.5	5.1	7.6	15.0	0.0	7.8
Prop In Lane	1.00		1.00	1.00		0.10	1.00		1.00	0.60		1.00
Lane Grp Cap(c), veh/h	80	3160	973	94	2130	1150	274	363	305	142	0	128
V/C Ratio(X)	0.81	0.35	0.07	0.83	0.56	0.56	0.46	0.15	0.22	0.69	0.00	0.46
Avail Cap(c_a), veh/h	255	3160	973	214	2130	1150	363	538	452	300	0	307
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.26	0.26	0.26	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	99.2	18.5	15.1	100.2	37.9	38.0	78.2	69.2	70.2	94.9	0.0	91.6
Incr Delay (d2), s/veh	17.5	0.3	0.1	5.0	0.3	0.5	1.2	0.2	0.4	5.9	0.0	2.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.0	13.2	2.3	6.2	28.2	30.4	10.3	4.3	5.4	9.4	0.0	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	116.7	18.8	15.2	105.2	38.2	38.5	79.4	69.4	70.6	100.8	0.0	94.1
LnGrp LOS	F	B	B	F	D	D	E	E	E	F		F
Approach Vol, veh/h		1229			1900			245			157	
Approach Delay, s/veh		23.8			41.1			74.8			98.3	
Approach LOS		C			D			E			F	

Timer - Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	30.1	139.3	24.3	26.3	18.6	140.7		50.6
Change Period (Y+Rc), s	8.5	7.2	8.6	8.6	8.9	* 7.2		8.6
Max Green Setting (Gmax), s	26.5	81.8	26.4	42.4	31.1	* 77		62.4
Max Q Clear Time (g_c+I1), s	11.8	23.8	15.5	17.0	9.8	57.8		9.6
Green Ext Time (p_c), s	0.1	9.1	0.2	0.7	0.1	11.4		0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	39.9
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	1689	118	66	1677	78	123	49	77	77	57	50
Future Volume (veh/h)	110	1689	118	66	1677	78	123	49	77	77	57	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1870	1870	1811	1870	1841	1870	1841	1826	1856	1870	1870
Adj Flow Rate, veh/h	112	1723	120	67	1711	80	126	50	79	79	58	51
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	2	2	6	2	4	2	4	5	3	2	2
Cap, veh/h	132	3023	939	84	2818	132	300	413	347	122	67	163
Arrive On Green	0.07	0.59	0.59	0.05	0.56	0.56	0.07	0.22	0.22	0.10	0.10	0.10
Sat Flow, veh/h	1767	5106	1585	1725	4999	234	1781	1841	1547	884	649	1585
Grp Volume(v), veh/h	112	1723	120	67	1165	626	126	50	79	137	0	51
Grp Sat Flow(s),veh/h/ln	1767	1702	1585	1725	1702	1828	1781	1841	1547	1534	0	1585
Q Serve(g_s), s	11.3	37.4	6.0	6.9	40.9	40.9	11.1	3.9	7.5	15.8	0.0	5.4
Cycle Q Clear(g_c), s	11.3	37.4	6.0	6.9	40.9	40.9	11.1	3.9	7.5	15.8	0.0	5.4
Prop In Lane	1.00		1.00	1.00		0.13	1.00		1.00	0.58		1.00
Lane Grp Cap(c), veh/h	132	3023	939	84	1919	1031	300	413	347	189	0	163
V/C Ratio(X)	0.85	0.57	0.13	0.80	0.61	0.61	0.42	0.12	0.23	0.72	0.00	0.31
Avail Cap(c_a), veh/h	305	3023	939	264	1919	1031	400	638	536	291	0	268
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.26	0.26	0.26	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	82.3	22.6	16.2	84.8	26.1	26.1	63.9	55.6	57.0	79.6	0.0	74.9
Incr Delay (d2), s/veh	13.7	0.8	0.3	4.7	0.4	0.7	0.9	0.1	0.3	5.2	0.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.5	20.9	4.1	4.6	19.4	20.9	8.8	3.3	5.3	10.8	0.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	96.0	23.4	16.5	89.4	26.4	26.8	64.8	55.8	57.4	84.7	0.0	75.9
LnGrp LOS	F	C	B	F	C	C	E	E	E	F		E
Approach Vol, veh/h		1955			1858			255			188	
Approach Delay, s/veh		27.1			28.8			60.7			82.3	
Approach LOS		C			C			E			F	

Timer - Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	17.2	113.8	21.9	27.1	22.3	108.7		49.0
Change Period (Y+Rc), s	8.5	7.2	8.6	8.6	8.9	* 7.2		8.6
Max Green Setting (Gmax), s	27.5	65.8	23.4	30.4	31.1	* 62		62.4
Max Q Clear Time (g_c+I1), s	13.3	39.4	13.1	17.8	13.3	42.9		9.5
Green Ext Time (p_c), s	0.1	14.1	0.2	0.7	0.2	11.1		0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	32.3
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	1841	118	82	1766	78	123	49	102	77	57	50
Future Volume (veh/h)	110	1841	118	82	1766	78	123	49	102	77	57	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1870	1870	1811	1870	1841	1870	1841	1826	1856	1870	1870
Adj Flow Rate, veh/h	112	1879	120	84	1802	80	126	50	104	79	58	51
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	2	2	6	2	4	2	4	5	3	2	2
Cap, veh/h	132	2968	921	102	2825	125	300	413	347	122	67	163
Arrive On Green	0.07	0.58	0.58	0.06	0.56	0.56	0.07	0.22	0.22	0.10	0.10	0.10
Sat Flow, veh/h	1767	5106	1585	1725	5012	222	1781	1841	1547	884	649	1585
Grp Volume(v), veh/h	112	1879	120	84	1223	659	126	50	104	137	0	51
Grp Sat Flow(s),veh/h/ln	1767	1702	1585	1725	1702	1830	1781	1841	1547	1534	0	1585
Q Serve(g_s), s	11.3	43.9	6.2	8.7	44.1	44.2	11.1	3.9	10.1	15.8	0.0	5.4
Cycle Q Clear(g_c), s	11.3	43.9	6.2	8.7	44.1	44.2	11.1	3.9	10.1	15.8	0.0	5.4
Prop In Lane	1.00		1.00	1.00		0.12	1.00		1.00	0.58		1.00
Lane Grp Cap(c), veh/h	132	2968	921	102	1919	1032	300	413	347	189	0	163
V/C Ratio(X)	0.85	0.63	0.13	0.82	0.64	0.64	0.42	0.12	0.30	0.72	0.00	0.31
Avail Cap(c_a), veh/h	305	2968	921	264	1919	1032	400	638	536	291	0	268
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.13	0.13	0.13	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	82.3	25.0	17.1	83.7	26.7	26.8	63.9	55.6	58.0	79.6	0.0	74.9
Incr Delay (d2), s/veh	13.7	1.0	0.3	2.2	0.2	0.4	0.9	0.1	0.5	5.2	0.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.5	24.1	4.2	5.0	19.7	21.2	8.8	3.3	7.1	10.8	0.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	96.0	26.0	17.4	86.0	27.0	27.2	64.8	55.8	58.5	84.7	0.0	75.9
LnGrp LOS	F	C	B	F	C	C	E	E	E	F		E
Approach Vol, veh/h		2111			1966			280			188	
Approach Delay, s/veh		29.2			29.6			60.9			82.3	
Approach LOS		C			C			E			F	

Timer - Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	19.2	111.8	21.9	27.1	22.3	108.7		49.0
Change Period (Y+Rc), s	8.5	7.2	8.6	8.6	8.9	* 7.2		8.6
Max Green Setting (Gmax), s	27.5	65.8	23.4	30.4	31.1	* 62		62.4
Max Q Clear Time (g_c+I1), s	10.7	45.9	13.1	17.8	13.3	46.2		12.1
Green Ext Time (p_c), s	0.1	13.0	0.2	0.7	0.2	10.3		0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	33.5
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



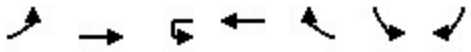
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	1861	118	84	1779	78	123	49	104	77	57	50
Future Volume (veh/h)	110	1861	118	84	1779	78	123	49	104	77	57	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1870	1870	1811	1870	1841	1870	1841	1826	1856	1870	1870
Adj Flow Rate, veh/h	112	1899	120	86	1815	80	126	50	106	79	58	51
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	2	2	6	2	4	2	4	5	3	2	2
Cap, veh/h	132	2962	920	104	2826	124	300	413	347	122	67	163
Arrive On Green	0.07	0.58	0.58	0.06	0.56	0.56	0.07	0.22	0.22	0.10	0.10	0.10
Sat Flow, veh/h	1767	5106	1585	1725	5014	221	1781	1841	1547	884	649	1585
Grp Volume(v), veh/h	112	1899	120	86	1231	664	126	50	106	137	0	51
Grp Sat Flow(s),veh/h/ln	1767	1702	1585	1725	1702	1831	1781	1841	1547	1534	0	1585
Q Serve(g_s), s	11.3	44.8	6.2	8.9	44.5	44.7	11.1	3.9	10.3	15.8	0.0	5.4
Cycle Q Clear(g_c), s	11.3	44.8	6.2	8.9	44.5	44.7	11.1	3.9	10.3	15.8	0.0	5.4
Prop In Lane	1.00		1.00	1.00		0.12	1.00		1.00	0.58		1.00
Lane Grp Cap(c), veh/h	132	2962	920	104	1919	1032	300	413	347	189	0	163
V/C Ratio(X)	0.85	0.64	0.13	0.83	0.64	0.64	0.42	0.12	0.31	0.72	0.00	0.31
Avail Cap(c_a), veh/h	305	2962	920	264	1919	1032	400	638	536	291	0	268
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.11	0.11	0.11	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	82.3	25.3	17.2	83.6	26.9	26.9	63.9	55.6	58.1	79.6	0.0	74.9
Incr Delay (d2), s/veh	13.7	1.1	0.3	1.9	0.2	0.3	0.9	0.1	0.5	5.2	0.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.5	24.5	4.2	5.0	19.7	21.2	8.8	3.3	7.3	10.8	0.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	96.0	26.3	17.5	85.5	27.0	27.2	64.8	55.8	58.6	84.7	0.0	75.9
LnGrp LOS	F	C	B	F	C	C	E	E	E	F		E
Approach Vol, veh/h		2131			1981			282			188	
Approach Delay, s/veh		29.5			29.6			60.9			82.3	
Approach LOS		C			C			E			F	

Timer - Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	19.4	111.6	21.9	27.1	22.3	108.7		49.0
Change Period (Y+Rc), s	8.5	7.2	8.6	8.6	8.9	* 7.2		8.6
Max Green Setting (Gmax), s	27.5	65.8	23.4	30.4	31.1	* 62		62.4
Max Q Clear Time (g_c+I1), s	10.9	46.8	13.1	17.8	13.3	46.7		12.3
Green Ext Time (p_c), s	0.2	12.8	0.2	0.7	0.2	10.2		0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	33.7
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

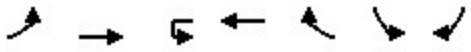


Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (veh/h)	7	1440	0	1890	3	10	20
Future Volume (veh/h)	7	1440	0	1890	3	10	20
Initial Q (Qb), veh	0	0		0	0	0	0
Lane Width Adj.	1.00	1.00		1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No	
Adj Sat Flow, veh/h/ln	1870	1870		1870	1870	1870	1870
Adj Flow Rate, veh/h	8	1565		2054	3	11	22
Peak Hour Factor	0.92	0.92		0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	110	2938		2395	743	139	279
Arrive On Green	0.01	0.58		0.47	0.47	0.26	0.26
Sat Flow, veh/h	1781	5274		5274	1585	534	1068
Grp Volume(v), veh/h	8	1565		2054	3	34	0
Grp Sat Flow(s),veh/h/ln	1781	1702		1702	1585	1651	0
Q Serve(g_s), s	0.2	16.4		31.2	0.1	1.4	0.0
Cycle Q Clear(g_c), s	0.2	16.4		31.2	0.1	1.4	0.0
Prop In Lane	1.00				1.00	0.32	0.65
Lane Grp Cap(c), veh/h	110	2938		2395	743	431	0
V/C Ratio(X)	0.07	0.53		0.86	0.00	0.08	0.00
Avail Cap(c_a), veh/h	329	2938		2507	778	431	0
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.2	11.4		20.6	12.3	24.4	0.0
Incr Delay (d2), s/veh	0.3	0.2		3.1	0.0	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	8.6		16.6	0.0	1.0	0.0
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	20.5	11.5		23.7	12.3	24.7	0.0
LnGrp LOS	C	B		C	B	C	
Approach Vol, veh/h		1573		2057		34	
Approach Delay, s/veh		11.6		23.7		24.7	
Approach LOS		B		C		C	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	9.3	48.1			57.4	30.0
Change Period (Y+Rc), s	8.4	7.1			7.1	7.2
Max Green Setting (Gmax), s	1.6	42.9			42.9	22.8
Max Q Clear Time (g_c+I1), s	2.2	33.2			18.4	3.4
Green Ext Time (p_c), s	0.0	7.8			11.6	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	18.5
HCM 7th LOS	B

Notes
User approved ignoring U-Turning movement.



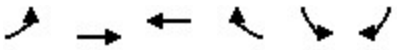
Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (veh/h)	19	1849	0	1886	10	7	13
Future Volume (veh/h)	19	1849	0	1886	10	7	13
Initial Q (Qb), veh	0	0		0	0	0	0
Lane Width Adj.	1.00	1.00		1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No	
Adj Sat Flow, veh/h/ln	1870	1870		1870	1870	1870	1870
Adj Flow Rate, veh/h	21	2010		2050	11	8	14
Peak Hour Factor	0.92	0.92		0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	134	2970		2370	736	148	260
Arrive On Green	0.02	0.58		0.46	0.46	0.26	0.26
Sat Flow, veh/h	1781	5274		5274	1585	577	1010
Grp Volume(v), veh/h	21	2010		2050	11	23	0
Grp Sat Flow(s),veh/h/ln	1781	1702		1702	1585	1660	0
Q Serve(g_s), s	0.4	24.1		31.9	0.3	0.9	0.0
Cycle Q Clear(g_c), s	0.4	24.1		31.9	0.3	0.9	0.0
Prop In Lane	1.00				1.00	0.35	0.61
Lane Grp Cap(c), veh/h	134	2970		2370	736	427	0
V/C Ratio(X)	0.16	0.68		0.86	0.01	0.05	0.00
Avail Cap(c_a), veh/h	326	2970		2470	767	427	0
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.5	12.8		21.3	12.8	24.8	0.0
Incr Delay (d2), s/veh	0.5	0.6		3.4	0.0	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.4	11.8		17.1	0.2	0.7	0.0
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	21.0	13.4		24.6	12.8	25.1	0.0
LnGrp LOS	C	B		C	B	C	
Approach Vol, veh/h		2031		2061		23	
Approach Delay, s/veh		13.5		24.6		25.1	
Approach LOS		B		C		C	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	10.4	48.3			58.7	30.0
Change Period (Y+Rc), s	8.4	7.1			7.1	7.2
Max Green Setting (Gmax), s	11.6	42.9			42.9	22.8
Max Q Clear Time (g_c+I1), s	2.4	33.9			26.1	2.9
Green Ext Time (p_c), s	0.0	7.3			12.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	19.1
HCM 7th LOS	B

Notes

User approved ignoring U-Turning movement.



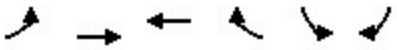
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	196	795	1127	33	17	348
Future Volume (veh/h)	196	795	1127	33	17	348
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1767	1811	1811	1618	1633	1841
Adj Flow Rate, veh/h	202	820	1162	0	18	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	9	6	6	19	18	4
Cap, veh/h	238	4081	2114		43	
Arrive On Green	0.14	0.83	0.61	0.00	0.03	0.00
Sat Flow, veh/h	1682	5107	3532	1372	1555	1560
Grp Volume(v), veh/h	202	820	1162	0	18	0
Grp Sat Flow(s),veh/h/ln	1682	1648	1721	1372	1555	1560
Q Serve(g_s), s	11.9	3.5	20.0	0.0	1.2	0.0
Cycle Q Clear(g_c), s	11.9	3.5	20.0	0.0	1.2	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	238	4081	2114		43	
V/C Ratio(X)	0.85	0.20	0.55		0.42	
Avail Cap(c_a), veh/h	626	4081	2114		345	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	42.7	1.9	11.4	0.0	48.8	0.0
Incr Delay (d2), s/veh	8.2	0.1	1.0	0.0	6.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.0	0.7	10.5	0.0	0.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	50.9	2.0	12.5	0.0	55.3	0.0
LnGrp LOS	D	A	B		E	
Approach Vol, veh/h		1022	1162		18	
Approach Delay, s/veh		11.6	12.5		55.3	
Approach LOS		B	B		E	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	21.5	70.2			91.7	10.2
Change Period (Y+Rc), s	7.1	* 7.6			7.6	7.4
Max Green Setting (Gmax), s	37.9	* 63			62.4	22.6
Max Q Clear Time (g_c+I1), s	13.9	22.0			5.5	3.2
Green Ext Time (p_c), s	0.5	9.1			5.9	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	12.4
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



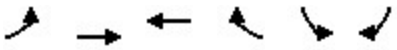
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	232	835	1139	36	27	360
Future Volume (veh/h)	232	835	1139	36	27	360
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1767	1811	1811	1618	1633	1841
Adj Flow Rate, veh/h	239	861	1174	0	28	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	9	6	6	19	18	4
Cap, veh/h	274	4061	2034		58	
Arrive On Green	0.16	0.82	0.59	0.00	0.04	0.00
Sat Flow, veh/h	1682	5107	3532	1372	1555	1560
Grp Volume(v), veh/h	239	861	1174	0	28	0
Grp Sat Flow(s),veh/h/ln	1682	1648	1721	1372	1555	1560
Q Serve(g_s), s	14.7	4.0	22.4	0.0	1.9	0.0
Cycle Q Clear(g_c), s	14.7	4.0	22.4	0.0	1.9	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	274	4061	2034		58	
V/C Ratio(X)	0.87	0.21	0.58		0.49	
Avail Cap(c_a), veh/h	602	4061	2034		332	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	43.2	2.0	13.4	0.0	50.0	0.0
Incr Delay (d2), s/veh	8.4	0.1	1.2	0.0	6.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.6	1.0	12.0	0.0	1.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	51.6	2.2	14.6	0.0	56.2	0.0
LnGrp LOS	D	A	B		E	
Approach Vol, veh/h		1100	1174		28	
Approach Delay, s/veh		12.9	14.6		56.2	
Approach LOS		B	B		E	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	24.4	70.2			94.6	11.3
Change Period (Y+Rc), s	7.1	* 7.6			7.6	7.4
Max Green Setting (Gmax), s	17.3	* 63			62.4	22.6
Max Q Clear Time (g_c+I1), s	16.7	24.4			6.0	3.9
Green Ext Time (p_c), s	0.6	9.1			6.3	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	14.3
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



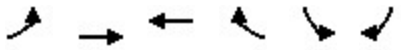
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	237	840	1141	36	27	361
Future Volume (veh/h)	237	840	1141	36	27	361
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1767	1811	1811	1618	1633	1841
Adj Flow Rate, veh/h	244	866	1176	0	28	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	9	6	6	19	18	4
Cap, veh/h	279	4063	2027		58	
Arrive On Green	0.17	0.82	0.59	0.00	0.04	0.00
Sat Flow, veh/h	1682	5107	3532	1372	1555	1560
Grp Volume(v), veh/h	244	866	1176	0	28	0
Grp Sat Flow(s),veh/h/ln	1682	1648	1721	1372	1555	1560
Q Serve(g_s), s	15.0	4.0	22.7	0.0	1.9	0.0
Cycle Q Clear(g_c), s	15.0	4.0	22.7	0.0	1.9	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	279	4063	2027		58	
V/C Ratio(X)	0.87	0.21	0.58		0.49	
Avail Cap(c_a), veh/h	600	4063	2027		331	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	43.2	2.0	13.6	0.0	50.2	0.0
Incr Delay (d2), s/veh	8.4	0.1	1.2	0.0	6.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.8	1.0	12.1	0.0	1.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	51.6	2.2	14.9	0.0	56.4	0.0
LnGrp LOS	D	A	B		E	
Approach Vol, veh/h		1110	1176		28	
Approach Delay, s/veh		13.0	14.9		56.4	
Approach LOS		B	B		E	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	24.7	70.2			94.9	11.3
Change Period (Y+Rc), s	7.1	* 7.6			7.6	7.4
Max Green Setting (Gmax), s	17.6	* 63			62.4	22.6
Max Q Clear Time (g_c+I1), s	17.0	24.7			6.0	3.9
Green Ext Time (p_c), s	0.6	9.2			6.3	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	14.5
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



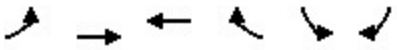
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	400	1024	881	47	24	363
Future Volume (veh/h)	400	1024	881	47	24	363
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1856	1841	1648	1856
Adj Flow Rate, veh/h	412	1056	908	0	25	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	3	4	17	3
Cap, veh/h	445	4289	1868		52	
Arrive On Green	0.25	0.84	0.53	0.00	0.03	0.00
Sat Flow, veh/h	1781	5274	3618	1560	1570	1572
Grp Volume(v), veh/h	412	1056	908	0	25	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1763	1560	1570	1572
Q Serve(g_s), s	26.7	4.9	19.3	0.0	1.8	0.0
Cycle Q Clear(g_c), s	26.7	4.9	19.3	0.0	1.8	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	445	4289	1868		52	
V/C Ratio(X)	0.93	0.25	0.49		0.48	
Avail Cap(c_a), veh/h	571	4289	1868		300	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	43.2	1.9	17.6	0.0	56.1	0.0
Incr Delay (d2), s/veh	18.2	0.1	0.9	0.0	6.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	19.4	1.3	11.6	0.0	1.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	61.5	2.0	18.5	0.0	62.8	0.0
LnGrp LOS	E	A	B		E	
Approach Vol, veh/h		1468	908		25	
Approach Delay, s/veh		18.7	18.5		62.8	
Approach LOS		B	B		E	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	36.6	70.2			106.8	11.3
Change Period (Y+Rc), s	7.1	* 7.6			7.6	7.4
Max Green Setting (Gmax), s	37.9	* 63			62.4	22.6
Max Q Clear Time (g_c+I1), s	28.7	21.3			6.9	3.8
Green Ext Time (p_c), s	0.9	6.4			8.2	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	19.1
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



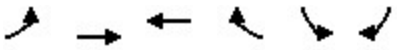
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	422	1050	923	58	30	399
Future Volume (veh/h)	422	1050	923	58	30	399
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1856	1841	1648	1856
Adj Flow Rate, veh/h	435	1082	952	0	31	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	3	4	17	3
Cap, veh/h	466	4281	1826		59	
Arrive On Green	0.26	0.84	0.52	0.00	0.04	0.00
Sat Flow, veh/h	1781	5274	3618	1560	1570	1572
Grp Volume(v), veh/h	435	1082	952	0	31	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1763	1560	1570	1572
Q Serve(g_s), s	28.8	5.3	21.6	0.0	2.3	0.0
Cycle Q Clear(g_c), s	28.8	5.3	21.6	0.0	2.3	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	466	4281	1826		59	
V/C Ratio(X)	0.93	0.25	0.52		0.53	
Avail Cap(c_a), veh/h	559	4281	1826		293	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	43.6	2.0	19.2	0.0	57.1	0.0
Incr Delay (d2), s/veh	20.8	0.1	1.1	0.0	7.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	21.1	1.5	12.9	0.0	1.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	64.3	2.1	20.3	0.0	64.3	0.0
LnGrp LOS	E	A	C		E	
Approach Vol, veh/h		1517	952		31	
Approach Delay, s/veh		20.0	20.3		64.3	
Approach LOS		B	C		E	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	38.7	70.2			108.9	11.9
Change Period (Y+Rc), s	7.1	* 7.6			7.6	7.4
Max Green Setting (Gmax), s	37.9	* 63			62.4	22.6
Max Q Clear Time (g_c+I1), s	30.8	23.6			7.3	4.3
Green Ext Time (p_c), s	0.8	6.8			8.5	0.0

Intersection Summary		
HCM 7th Control Delay, s/veh	20.7	
HCM 7th LOS	C	

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	425	1054	928	58	30	404
Future Volume (veh/h)	425	1054	928	58	30	404
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1856	1841	1648	1856
Adj Flow Rate, veh/h	438	1087	957	0	31	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	3	4	17	3
Cap, veh/h	469	4283	1822		59	
Arrive On Green	0.26	0.84	0.52	0.00	0.04	0.00
Sat Flow, veh/h	1781	5274	3618	1560	1570	1572
Grp Volume(v), veh/h	438	1087	957	0	31	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1763	1560	1570	1572
Q Serve(g_s), s	29.1	5.3	21.8	0.0	2.3	0.0
Cycle Q Clear(g_c), s	29.1	5.3	21.8	0.0	2.3	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	469	4283	1822		59	
V/C Ratio(X)	0.93	0.25	0.53		0.53	
Avail Cap(c_a), veh/h	557	4283	1822		293	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	43.6	2.0	19.4	0.0	57.2	0.0
Incr Delay (d2), s/veh	21.1	0.1	1.1	0.0	7.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	21.3	1.5	13.0	0.0	1.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	64.7	2.1	20.5	0.0	64.4	0.0
LnGrp LOS	E	A	C		E	
Approach Vol, veh/h		1525	957		31	
Approach Delay, s/veh		20.1	20.5		64.4	
Approach LOS		C	C		E	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	39.0	70.2			109.2	11.9
Change Period (Y+Rc), s	7.1	* 7.6			7.6	7.4
Max Green Setting (Gmax), s	37.9	* 63			62.4	22.6
Max Q Clear Time (g_c+I1), s	31.1	23.8			7.3	4.3
Green Ext Time (p_c), s	0.8	6.8			8.6	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	20.8
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	152	4	2	186	23	4
Future Vol, veh/h	152	4	2	186	23	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	208	5	3	255	32	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	214	0	471	211
Stage 1	-	-	-	-	211	-
Stage 2	-	-	-	-	260	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1356	-	551	829
Stage 1	-	-	-	-	824	-
Stage 2	-	-	-	-	783	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1356	-	550	829
Mov Cap-2 Maneuver	-	-	-	-	550	-
Stage 1	-	-	-	-	824	-
Stage 2	-	-	-	-	781	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.08	11.65
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	579	-	-	19	-
HCM Lane V/C Ratio	0.064	-	-	0.002	-
HCM Control Delay (s/veh)	11.6	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	214	4	2	368	23	4
Future Vol, veh/h	214	4	2	368	23	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	293	5	3	504	32	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	299	0	805	296
Stage 1	-	-	-	-	296	-
Stage 2	-	-	-	-	510	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1263	-	352	743
Stage 1	-	-	-	-	755	-
Stage 2	-	-	-	-	603	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1263	-	350	743
Mov Cap-2 Maneuver	-	-	-	-	350	-
Stage 1	-	-	-	-	755	-
Stage 2	-	-	-	-	601	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.04	15.49
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	380	-	-	10	-
HCM Lane V/C Ratio	0.097	-	-	0.002	-
HCM Control Delay (s/veh)	15.5	-	-	7.9	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	214	11	2	368	44	4
Future Vol, veh/h	214	11	2	368	44	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	73	73	73	73	73	73
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	293	15	3	504	60	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	308	0	810	301
Stage 1	-	-	-	-	301	-
Stage 2	-	-	-	-	510	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1252	-	349	739
Stage 1	-	-	-	-	751	-
Stage 2	-	-	-	-	603	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1252	-	348	739
Mov Cap-2 Maneuver	-	-	-	-	348	-
Stage 1	-	-	-	-	751	-
Stage 2	-	-	-	-	601	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.04	17.05
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	364	-	-	10	-
HCM Lane V/C Ratio	0.181	-	-	0.002	-
HCM Control Delay (s/veh)	17	-	-	7.9	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	153	27	3	78	14	2
Future Vol, veh/h	153	27	3	78	14	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	166	29	3	85	15	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	196	0	272	181
Stage 1	-	-	-	-	181	-
Stage 2	-	-	-	-	91	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1377	-	717	862
Stage 1	-	-	-	-	850	-
Stage 2	-	-	-	-	932	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1377	-	715	862
Mov Cap-2 Maneuver	-	-	-	-	715	-
Stage 1	-	-	-	-	850	-
Stage 2	-	-	-	-	930	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.28	10.05
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	731	-	-	67	-
HCM Lane V/C Ratio	0.024	-	-	0.002	-
HCM Control Delay (s/veh)	10	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	359	27	3	200	14	2
Future Vol, veh/h	359	27	3	200	14	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	390	29	3	217	15	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	420	0	629	405
Stage 1	-	-	-	-	405	-
Stage 2	-	-	-	-	224	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1140	-	446	646
Stage 1	-	-	-	-	674	-
Stage 2	-	-	-	-	813	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1140	-	445	646
Mov Cap-2 Maneuver	-	-	-	-	445	-
Stage 1	-	-	-	-	674	-
Stage 2	-	-	-	-	811	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.12	13.08
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	463	-	-	27	-
HCM Lane V/C Ratio	0.038	-	-	0.003	-
HCM Control Delay (s/veh)	13.1	-	-	8.2	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	359	46	3	200	27	2
Future Vol, veh/h	359	46	3	200	27	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	390	50	3	217	29	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	440	0	639	415
Stage 1	-	-	-	-	415	-
Stage 2	-	-	-	-	224	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1120	-	440	637
Stage 1	-	-	-	-	666	-
Stage 2	-	-	-	-	813	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1120	-	439	637
Mov Cap-2 Maneuver	-	-	-	-	439	-
Stage 1	-	-	-	-	666	-
Stage 2	-	-	-	-	811	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.12	13.64
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	448	-	-	27	-
HCM Lane V/C Ratio	0.07	-	-	0.003	-
HCM Control Delay (s/veh)	13.6	-	-	8.2	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	6	2	87	101	0
Future Vol, veh/h	0	6	2	87	101	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	7	2	95	110	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	209	110	110	0	-	0
Stage 1	110	-	-	-	-	-
Stage 2	99	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	780	944	1480	-	-	-
Stage 1	915	-	-	-	-	-
Stage 2	925	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	778	944	1480	-	-	-
Mov Cap-2 Maneuver	778	-	-	-	-	-
Stage 1	913	-	-	-	-	-
Stage 2	925	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.84	0.17	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	40	-	944	-	-
HCM Lane V/C Ratio	0.001	-	0.007	-	-
HCM Control Delay (s/veh)	7.4	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	4	6	101	87	0
Future Vol, veh/h	0	4	6	101	87	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	7	110	95	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	217	95	95	0	-	0
Stage 1	95	-	-	-	-	-
Stage 2	123	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	771	962	1499	-	-	-
Stage 1	929	-	-	-	-	-
Stage 2	903	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	767	962	1499	-	-	-
Mov Cap-2 Maneuver	767	-	-	-	-	-
Stage 1	925	-	-	-	-	-
Stage 2	903	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.76	0.42	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	101	-	962	-	-
HCM Lane V/C Ratio	0.004	-	0.005	-	-
HCM Control Delay (s/veh)	7.4	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	6	2	89	107	0
Future Vol, veh/h	0	6	2	89	107	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	7	2	97	116	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	217	116	116	0	-	0
Stage 1	116	-	-	-	-	-
Stage 2	101	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	771	936	1472	-	-	-
Stage 1	909	-	-	-	-	-
Stage 2	923	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	770	936	1472	-	-	-
Mov Cap-2 Maneuver	770	-	-	-	-	-
Stage 1	907	-	-	-	-	-
Stage 2	923	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.87	0.16	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	40	-	936	-	-
HCM Lane V/C Ratio	0.001	-	0.007	-	-
HCM Control Delay (s/veh)	7.4	0	8.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	4	6	107	91	0
Future Vol, veh/h	0	4	6	107	91	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	7	116	99	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	228	99	99	0	-	0
Stage 1	99	-	-	-	-	-
Stage 2	129	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	760	957	1494	-	-	-
Stage 1	925	-	-	-	-	-
Stage 2	897	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	756	957	1494	-	-	-
Mov Cap-2 Maneuver	756	-	-	-	-	-
Stage 1	921	-	-	-	-	-
Stage 2	897	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.78	0.39	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	96	-	957	-	-
HCM Lane V/C Ratio	0.004	-	0.005	-	-
HCM Control Delay (s/veh)	7.4	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	6	2	91	113	0
Future Vol, veh/h	0	6	2	91	113	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	7	2	99	123	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	226	123	123	0	-	0
Stage 1	123	-	-	-	-	-
Stage 2	103	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	762	928	1464	-	-	-
Stage 1	903	-	-	-	-	-
Stage 2	921	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	761	928	1464	-	-	-
Mov Cap-2 Maneuver	761	-	-	-	-	-
Stage 1	901	-	-	-	-	-
Stage 2	921	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.91	0.16	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	39	-	928	-	-
HCM Lane V/C Ratio	0.001	-	0.007	-	-
HCM Control Delay (s/veh)	7.5	0	8.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	4	5	113	95	0
Future Vol, veh/h	0	4	5	113	95	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	5	123	103	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	237	103	103	0	-	0
Stage 1	103	-	-	-	-	-
Stage 2	134	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	751	952	1489	-	-	-
Stage 1	921	-	-	-	-	-
Stage 2	893	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	748	952	1489	-	-	-
Mov Cap-2 Maneuver	748	-	-	-	-	-
Stage 1	917	-	-	-	-	-
Stage 2	893	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.8	0.31	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	76	-	952	-	-
HCM Lane V/C Ratio	0.004	-	0.005	-	-
HCM Control Delay (s/veh)	7.4	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	6	2	93	119	0
Future Vol, veh/h	0	6	2	93	119	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	7	2	101	129	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	235	129	129	0	-	0
Stage 1	129	-	-	-	-	-
Stage 2	105	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	753	920	1456	-	-	-
Stage 1	897	-	-	-	-	-
Stage 2	919	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	752	920	1456	-	-	-
Mov Cap-2 Maneuver	752	-	-	-	-	-
Stage 1	895	-	-	-	-	-
Stage 2	919	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.94	0.16	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	38	-	920	-	-
HCM Lane V/C Ratio	0.001	-	0.007	-	-
HCM Control Delay (s/veh)	7.5	0	8.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	4	6	118	99	0
Future Vol, veh/h	0	4	6	118	99	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	7	128	108	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	249	108	108	0	-	0
Stage 1	108	-	-	-	-	-
Stage 2	141	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	740	946	1483	-	-	-
Stage 1	917	-	-	-	-	-
Stage 2	886	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	736	946	1483	-	-	-
Mov Cap-2 Maneuver	736	-	-	-	-	-
Stage 1	912	-	-	-	-	-
Stage 2	886	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.82	0.36	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	87	-	946	-	-
HCM Lane V/C Ratio	0.004	-	0.005	-	-
HCM Control Delay (s/veh)	7.4	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	6	2	95	125	0
Future Vol, veh/h	0	6	2	95	125	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	7	2	103	136	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	243	136	136	0	-	0
Stage 1	136	-	-	-	-	-
Stage 2	108	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	745	913	1448	-	-	-
Stage 1	891	-	-	-	-	-
Stage 2	917	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	744	913	1448	-	-	-
Mov Cap-2 Maneuver	744	-	-	-	-	-
Stage 1	889	-	-	-	-	-
Stage 2	917	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.97	0.15	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	37	-	913	-	-
HCM Lane V/C Ratio	0.002	-	0.007	-	-
HCM Control Delay (s/veh)	7.5	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	4	6	124	103	0
Future Vol, veh/h	0	4	6	124	103	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	7	135	112	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	260	112	112	0	-	0
Stage 1	112	-	-	-	-	-
Stage 2	148	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	729	941	1478	-	-	-
Stage 1	913	-	-	-	-	-
Stage 2	880	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	726	941	1478	-	-	-
Mov Cap-2 Maneuver	726	-	-	-	-	-
Stage 1	908	-	-	-	-	-
Stage 2	880	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.84	0.34	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	83	-	941	-	-
HCM Lane V/C Ratio	0.004	-	0.005	-	-
HCM Control Delay (s/veh)	7.4	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Osceola County

ECONOLITE

MOVING TRAFFIC FORWARD

Narcoossee Rd @ Rummell - EOS- 10.39.130.161 - Econolite Type - EOS

Controller Timing Plan (MM) 2-1

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
2-1-1	Minimum Green															
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	6	15	7	10	6	15	7	10	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Variable Initial															
Lane	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-1-2	Vehicle Passage															
Vehicle Ext	1.5	3.5	1.5	2.0	1.5	3.5	1.5	2.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Volume Occupancy															
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-3	Max Green Data															
Max1	15	60	25	20	15	60	20	20	35	35	35	35	35	35	35	35
Max2	20	55	25	20	20	55	20	25	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Dynamic Max															
DYM Max	0	70	0	0	0	70	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	5.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-4	Pedestrian															
Delay Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	7	0	7	0	7	0	10	0	10	0	10	0	10
Ped Clear	0	24	0	32	0	28	0	34	0	16	0	16	0	16	0	16
	Alternate															
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Pedestrian Carry Over															
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Max Extension															
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Hawk															

Ingress Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Travel Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-1-5	Clearance															
Pre-Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.8	4.8	4.4	3.7	4.8	4.8	3.7	4.4	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	3.2	3.5	2.6	2.6	3.5	3.5	2.7	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	Max Extension															
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Hawk Flash															
Yellow	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Red Delay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Plan 1 - ""Continued

Phase Recall (MM) 2-1-6

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector		X				X										
Vehicle Recall		X				X										
Ped Recall																
Max Recall																
Soft Recall																
No Rest																

Overlap (MM) 2-1-7

Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	Leading															
Adv. Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adv. Ped	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay FYA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Trailing															
Lag Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phase Outputs (MM) 2-1-8

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Double Serve															
Dbl Serv Ph.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Plan 2 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
2-1-1	Minimum Green															
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Variable Initial															

Event Plan - 5 - Event Type: "Auto"

Timing Plan:	0	Veh Detector Plan:	0
Sequence:	0	Veh Det Diag Plan:	0
SCP Strategy Plan:	0	Ped Det Diag Plan:	0
SCP Detector Plan:	0	Det Log:	None
Override Sys:	No	Red Rest:	No
Backup Prevent Plan:	0	Exit Option:	Off

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Event Plan - 6 - "6" - Event Type: "Coord"

Cycle Length:	220	Offset Value:	25s	Actuated Coord:	No	Splits In:	Seconds	Offsets In:	Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	40	100	30	50	40	100	30	50	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																

Dwell/Add Time:	0
Timing Plan:	0
Sequence:	0
Actuated Walk Rest:	No
Phase Reservice:	No
Max Select:	MAXINH
Max Transition:	0
Ring Group Offset Disp:	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0

Event Plan - 15 - "15" - Event Type: "Coord"

Cycle Length:	190	Offset Value:	129s	Actuated Coord:	No	Splits In:	Seconds	Offsets In:	Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Split	30	90	30	40	30	90	30	40	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time:	0
Timing Plan:	0
Sequence:	0
Actuated Walk Rest:	No
Phase Reservice:	No
Max Select:	MAXINH
Max Transition:	0
Ring Group Offset Disp:	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	190s	190s	0s	0s

	1	2	3	4
Ring Manual Permissive Period	0	0	0	0

Veh Perm 1:	0	Veh Perm 2 Disp:	0
Veh Perm 2:	0		

SCP Strategy Plan:	0	Veh Detector Plan:	0
SCP Detector Plan:	0	Veh Det Diag Plan:	0
Override Sys:	No	Ped Det Diag Plan:	0
Backup Prevent Plan:	0	Det Log:	None
Exit Option:	Off	:	

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Event Plan - 16 - Event Type: "Auto"

Osceola County

ECONOLITE

MOVING TRAFFIC FORWARD

Narcoossee Rd @ Rummell - EOS- 10.39.130.161 - Econolite Type - EOS

Time Base Day Plan/Schedule
Day Plan (MM) 5-3

Day Plan #1 - "1"

Event	Event Plan	Start Time
1	6	06:15
2	15	15:19
3	100	00:00

Osceola County

ECONOLITE

MOVING TRAFFIC FORWARD

Narcoossee Rd @ 10th St - EOS- 10.39.130.145 - Econolite Type - EOS

Controller Timing Plan (MM) 2-1

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
2-1-1	Minimum Green															
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	7	15	7	10	7	15	7	10	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Variable Initial															
Lane	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-1-2	Vehicle Passage															
Vehicle Ext	1.5	3.5	1.5	2.0	1.5	3.5	1.5	2.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Volume Occupancy															
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-3	Max Green Data															
Max1	39	70	37	37	23	60	70	34	35	35	35	35	35	35	35	35
Max2	22	60	22	18	15	60	18	22	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Dynamic Max															
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-4	Pedestrian															
Delay Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	7	0	7	0	7	0	10	0	10	0	10	0	10
Ped Clear	0	25	0	35	0	22	0	37	0	16	0	16	0	16	0	16
	Alternate															
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Pedestrian Carry Over															
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Max Extension															
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Hawk															

Ingress Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Travel Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-1-5	Clearance															
Pre-Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.8	4.8	3.4	3.7	4.8	4.8	3.7	3.7	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	2.9	2.0	2.4	3.4	2.4	2.0	2.1	3.4	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	Max Extension															
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Hawk Flash															
Yellow	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Red Delay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Plan 1 - ""Continued

Phase Recall (MM) 2-1-6

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector		X				X			X	X	X	X	X	X	X	X
Vehicle Recall		X				X										
Ped Recall		X				X										
Max Recall																
Soft Recall																
No Rest																

Overlap (MM) 2-1-7

Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	Leading															
Adv. Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adv. Ped	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay FYA	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Trailing															
Lag Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phase Outputs (MM) 2-1-8

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Double Serve															
Dbl Serv Ph.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Plan 2 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
2-1-1	Minimum Green															
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Variable Initial															

Osceola County

ECONOLITE

MOVING TRAFFIC FORWARD

US 192 @ Old Hickory Tree Rd - EOS 10.39.130.97 - Econolite Type - EOS

Controller Timing Plan (MM) 2-1

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	W-L	E-T	N-L	S-LTR	E-L	W-T	S-L	N-TR	N	N	N	N	N	N	N	N
2-1-1	Minimum Green															
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	8	16	8	8	8	16	0	8	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Variable Initial															
Lane	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-1-2	Vehicle Passage															
Vehicle Ext	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Volume Occupancy															
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-3	Max Green Data															
Max1	25	60	25	30	25	60	0	30	35	35	35	35	35	35	35	35
Max2	20	65	25	25	20	60	0	25	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Dynamic Max															
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-4	Pedestrian															
Delay Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	7	0	7	0	7	0	0	0	0	0	0	0	0
Ped Clear	0	28	0	41	0	27	0	35	0	16	0	16	0	16	0	16
	Alternate															
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Pedestrian Carry Over															
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Max Extension															
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Hawk															

Ingress Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Travel Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-1-5	Clearance															
Pre-Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	5.1	5.2	4.8	4.8	5.2	5.1	3.0	4.8	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	3.4	2.0	3.8	3.8	3.7	2.0	0.0	3.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	Max Extension															
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Hawk Flash															
Yellow	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Red Delay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Plan 1 - ""Continued

Phase Recall (MM) 2-1-6

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector		X				X										
Vehicle Recall		X				X										
Ped Recall																
Max Recall																
Soft Recall																
No Rest																

Overlap (MM) 2-1-7

Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	Leading															
Adv. Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adv. Ped	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay FYA	4.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Trailing															
Lag Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phase Outputs (MM) 2-1-8

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Double Serve															
Dbl Serv Ph.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Plan 2 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	W-L	E-T	N-L	S-LTR	E-L	W-T	S-L	N-TR	N	N	N	N	N	N	N	N
2-1-1	Minimum Green															
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Variable Initial															

Event Plan - 5 - Event Type: "Auto"

Timing Plan:	0	Veh Detector Plan:	0
Sequence:	0	Veh Det Diag Plan:	0
SCP Strategy Plan:	0	Ped Det Diag Plan:	0
SCP Detector Plan:	0	Det Log:	None
Override Sys:	No	Red Rest:	No
Backup Prevent Plan:	0	Exit Option:	Off

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Event Plan - 6 - "6" - Event Type: "Coord"

Cycle Length:	210	Offset Value:	85s	Actuated Coord:	Yes	Splits In:	Seconds	Offsets In:	Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	W-L	E-T	N-L	S-LTR	E-L	W-T	S-L	N-TR	N	N	N	N	N	N	N	N
Split	35	89	35	51	40	84	0	71	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																

Dwell/Add Time:	0
Timing Plan:	0
Sequence:	1
Actuated Walk Rest:	No
Phase Reservice:	No
Max Select:	MAXINH
Max Transition:	0
Ring Group Offset Disp:	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0

Event Plan - 13 - Event Type: "Auto"

Timing Plan:	0	Veh Detector Plan:	0
Sequence:	0	Veh Det Diag Plan:	0
SCP Strategy Plan:	0	Ped Det Diag Plan:	0
SCP Detector Plan:	0	Det Log:	None
Override Sys:	No	Red Rest:	No
Backup Prevent Plan:	0	Exit Option:	Off

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Event Plan - 14 - "14" - Event Type: "Coord"

Cycle Length:	180	Offset Value:	134s	Actuated Coord:	Yes	Splits In:	Seconds
Offsets In:	Seconds						

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	W-L	E-T	N-L	S-LTR	E-L	W-T	S-L	N-TR	N	N	N	N	N	N	N	N
Split	36	73	32	39	40	69	0	71	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																

Dwell/Add Time:	0
Timing Plan:	0
Sequence:	1
Actuated Walk Rest:	No
Phase Reservice:	No
Max Select:	MAXINH
Max Transition:	0
Ring Group Offset Disp:	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0

Osceola County

ECONOLITE

MOVING TRAFFIC FORWARD

US 192 @ Old Hickory Tree Rd - EOS 10.39.130.97 - Econolite Type - EOS

Time Base Day Plan/Schedule
Day Plan (MM) 5-3

Day Plan #1 - "1"

Event	Event Plan	Start Time
1	31	09:00
2	100	21:00

Day Plan #2 - "2"

Event	Event Plan	Start Time
1	6	06:00
2	10	10:00
3	14	14:30
4	19	18:30
5	100	20:30

Day Plan #3 - "3"

Event	Event Plan	Start Time
1	31	07:30
2	100	21:00

Osceola County

ECONOLITE

MOVING TRAFFIC FORWARD

US 192 @ Narcoossee Rd - EOS 10.39.130.113 - Econolite Type - EOS

Controller Timing Plan (MM) 2-1

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	E-L	W-T	S-L	N-T	W-L	E-T	N-L	S-T	N	N	N	N	N	N	N	N
2-1-1	Minimum Green															
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	8	20	8	10	8	20	8	10	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Variable Initial															
Lane	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-1-2	Vehicle Passage															
Vehicle Ext	4.0	3.0	3.5	3.5	3.5	3.0	3.0	2.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Volume Occupancy															
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-3	Max Green Data															
Max1	50	70	35	55	35	70	48	40	35	35	35	35	35	35	35	35
Max2	30	70	25	30	25	70	25	30	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Dynamic Max															
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2-1-4	Pedestrian															
Delay Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	7	0	7	0	7	0	10	0	10	0	10	0	10
Ped Clear	0	34	0	43	0	41	0	45	0	16	0	16	0	16	0	16
	Alternate															
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Pedestrian Carry Over															
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Max Extension															
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Hawk															

Ingress Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Travel Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-1-5	Clearance															
Pre-Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	5.1	5.2	4.8	4.8	5.2	5.1	4.8	4.8	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	4.0	2.0	3.9	2.0	3.4	2.0	3.2	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	Max Extension															
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Hawk Flash															
Yellow	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Red Delay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Plan 1 - ""Continued

Phase Recall (MM) 2-1-6

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector		X				X										
Vehicle Recall		X				X										
Ped Recall																
Max Recall																
Soft Recall																
No Rest																

Overlap (MM) 2-1-7

Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	Leading															
Adv. Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adv. Ped	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay FYA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Trailing															
Lag Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phase Outputs (MM) 2-1-8

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Double Serve															
Dbl Serv Ph.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Plan 2 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	E-L	W-T	S-L	N-T	W-L	E-T	N-L	S-T	N	N	N	N	N	N	N	N
2-1-1	Minimum Green															
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Variable Initial															

Event Plan - 2 - "2" - Event Type: "Coord"

Cycle Length:	143	Offset Value:	127s	Actuated Coord:	Yes	Splits In:	Seconds	Offsets In:	Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	E-L	W-T	S-L	N-T	W-L	E-T	N-L	S-T	N	N	N	N	N	N	N	N
Split	38	40	30	35	38	40	25	40	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall			X													
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time:	0
Timing Plan:	0
Sequence:	2
Actuated Walk Rest:	No
Phase Reservice:	No
Max Select:	MAXINH
Max Transition:	4
Ring Group Offset Disp:	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	143s	143s	0s	0s

	1	2	3	4
Ring Manual Permissive Period	0	0	0	0

Veh Perm 1:	0	Veh Perm 2 Disp:	0
Veh Perm 2:	0		

SCP Strategy Plan:	0	Veh Detector Plan:	0
SCP Detector Plan:	0	Veh Det Diag Plan:	1
Override Sys:	No	Ped Det Diag Plan:	1
Backup Prevent Plan:	0	Det Log:	None
Exit Option:	Off	:	

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Event Plan - 3 - "3" - Event Type: "Coord"

	210		0s		Yes		Seconds	Seconds

Cycle Length:	Offset Value:	Actuated Coord:	Splits In:	Offsets In:

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	E-L	W-T	S-L	N-T	W-L	E-T	N-L	S-T	N	N	N	N	N	N	N	N
Split	50	65	50	45	51	64	40	55	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall	X		X													
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time:	0
Timing Plan:	0
Sequence:	2
Actuated Walk Rest:	No
Phase Reservice:	No
Max Select:	MAXINH
Max Transition:	0
Ring Group Offset Disp:	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	210s	210s	0s	0s

	1	2	3	4
Ring Manual Permissive Period	0	0	0	0

Veh Perm 1:	0	Veh Perm 2 Disp:	0
Veh Perm 2:	0		

SCP Strategy Plan:	0	Veh Detector Plan:	0
SCP Detector Plan:	0	Veh Det Diag Plan:	1
Override Sys:	No	Ped Det Diag Plan:	1
Backup Prevent Plan:	0	Det Log:	None
Exit Option:	Off	:	

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Event Plan - 6 - "6" - Event Type: "Coord"

Cycle Length: 210 Offset Value: 0s Actuated Coord: Yes Splits In: Seconds Offsets In: Seconds

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	E-L	W-T	S-L	N-T	W-L	E-T	N-L	S-T	N	N	N	N	N	N	N	N
Split	41	67	41	61	47	61	39	63	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Fixed Force Off																
Adaptive Split																
Veh Ext 2																
Vehicle Recall																
Walk 2																
Pedestrian Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit Phase									X	X	X	X	X	X	X	X

Dwell/Add Time: 0
Timing Plan: 0
Sequence: 0
Actuated Walk Rest: Yes
Phase Reservice: No
Max Select: MAXINH
Max Transition: 0
Ring Group Offset Disp: 0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Split Sum	210s	210s	0s	0s

	1	2	3	4
Ring Manual Permissive Period	0	0	0	0

Veh Perm 1: 0 Veh Perm 2 Disp: 0
Veh Perm 2: 0

SCP Strategy Plan: 0 Veh Detector Plan: 0
SCP Detector Plan: 0 Veh Det Diag Plan: 0
Override Sys: No Ped Det Diag Plan: 0
Backup Prevent Plan: 0 Det Log: None
Exit Option: Off :

Outputs	1	2	3	4	5	6	7	8
Coord Patt Spec Func Outputs								
Spec Func (1-8)								
Aux Func (1-3)								

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
LP 1-25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 26-50	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 51-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Event Plan - 7 - Event Type: "Auto"

Timing Plan: 0 0

Osceola County

ECONOLITE

MOVING TRAFFIC FORWARD

US 192 @ Narcoossee Rd - EOS 10.39.130.113 - Econolite Type - EOS

Time Base Day Plan/Schedule
Day Plan (MM) 5-3

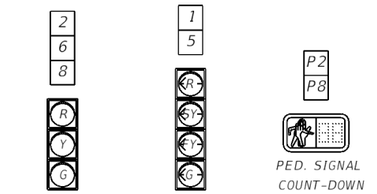
Day Plan #1 - "1"

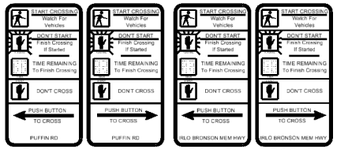
Event	Event Plan	Start Time
1	100	00:00
2	6	06:15
3	12	12:00
4	3	14:30
5	100	19:00

Day Plan #2 - "2"

Event	Event Plan	Start Time
1	100	00:00

TRAFFIC SIGNAL HEAD DETAILS





R10-3i 9"X18" 1 EA | R10-3i 9"X18" 1 EA | R10-3i 9"X18" 1 EA | R10-3i 9"X18" 1 EA

(INCLUDED IN 665-1-11)

HYBRID (VIDE0+RADAR) DETECTION PAY ITEMS

V/R1 V/R2

660-3-12 2 EA

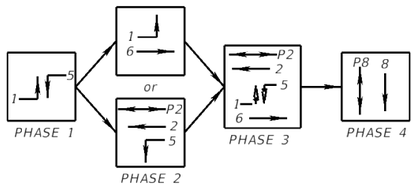
V3

660-4-12 1 EA

LEGEND

- TRAFFIC DATA VVDS (ADVANCE/PRESENCE)
- CCTV CAMERA
- GPS PREEMPTION

S.O.P. 10 (MODIFIED)



INTERNALLY ILLUMINATED CANTILVER SIGN (DOUBLE SIDED) N.T.S.

A — E Irlo Bronson Mem Hwy

700-5-22 1 EA

B — Puffin Rd

700-5-22 2 EA

C — TURNING VEHICLES / STOP FOR

R10-15a 36"X36"

700-3-201 1 EA

D — LEFT TURN YIELD ON FLASHING YELLOW ARROW

FTP-85-13 30"X36"

700-3-201 1 EA

E — U-TURN YIELD ON FLASHING YELLOW ARROW

FTP-85-13A 30"X36"

700-3-201 1 EA

INITIAL CONTROLLER TIMINGS

	PHASE	EBL	WBT	WBL	EBT	SB
	TIMING FUNCTION					
	MOVEMENT NUMBER	1	2	5	6	8
TIMING FUNCTION	MINIMUM GREEN	5.0	15.0	5.0	15.0	10.0
	EXTENSION	2.2	2.2	2.2	2.2	1.9
	MAXIMUM GREEN 1	20.0	50.0	20.0	50.0	30.0
	MAXIMUM GREEN 2	--	--	--	--	--
	YELLOW CLEARANCE	5.1	5.1	5.1	5.1	3.4
	ALL RED	3.3	2.0	3.3	2.0	3.8
	PEDESTRIAN WALK	--	7.0	--	--	7.0
	PED. CLEARANCE	--	20.0	--	--	35.0
	RECALL	--	Min	--	Min	--
	FLASH	R	Y	R	Y	R

SIGNAL TIMINGS MAY BE ADJUSTED BY OSCEOLA COUNTY BASED ON OBSERVED TRAFFIC FLOW WITHIN TWO WEEKS OF SIGNAL ACTIVATION AND FOLLOWING COORDINATION WITH THE ENGINEER OF RECORD.

CABINET PAY ITEMS

13 RUNS @ 40 LF
4-2" SIGNAL
1-2" VEHICLE DETECTION/CCTV
1-2" PEDESTRIAN
1-2" PED DETECTOR
1-2" ITS COMMUNICATION
1-2" ELECTRIC SERVICE
4-2" SPARE

611-1-1	0.20 MI
611-2-1	1 EA
630-2-11	30 LF
632-7-1	1 PI
633-3-13	1 EA
633-3-15	1 EA
633-3-17	1 EA
635-2-11	4 EA
660-3-11	1 EA
663-1-123	1 EA
670-5-112	1 EA
684-1-1	1 EA
685-1-13	1 EA
685-2-1	1 EA

ELECTRIC SERVICE PAY ITEMS

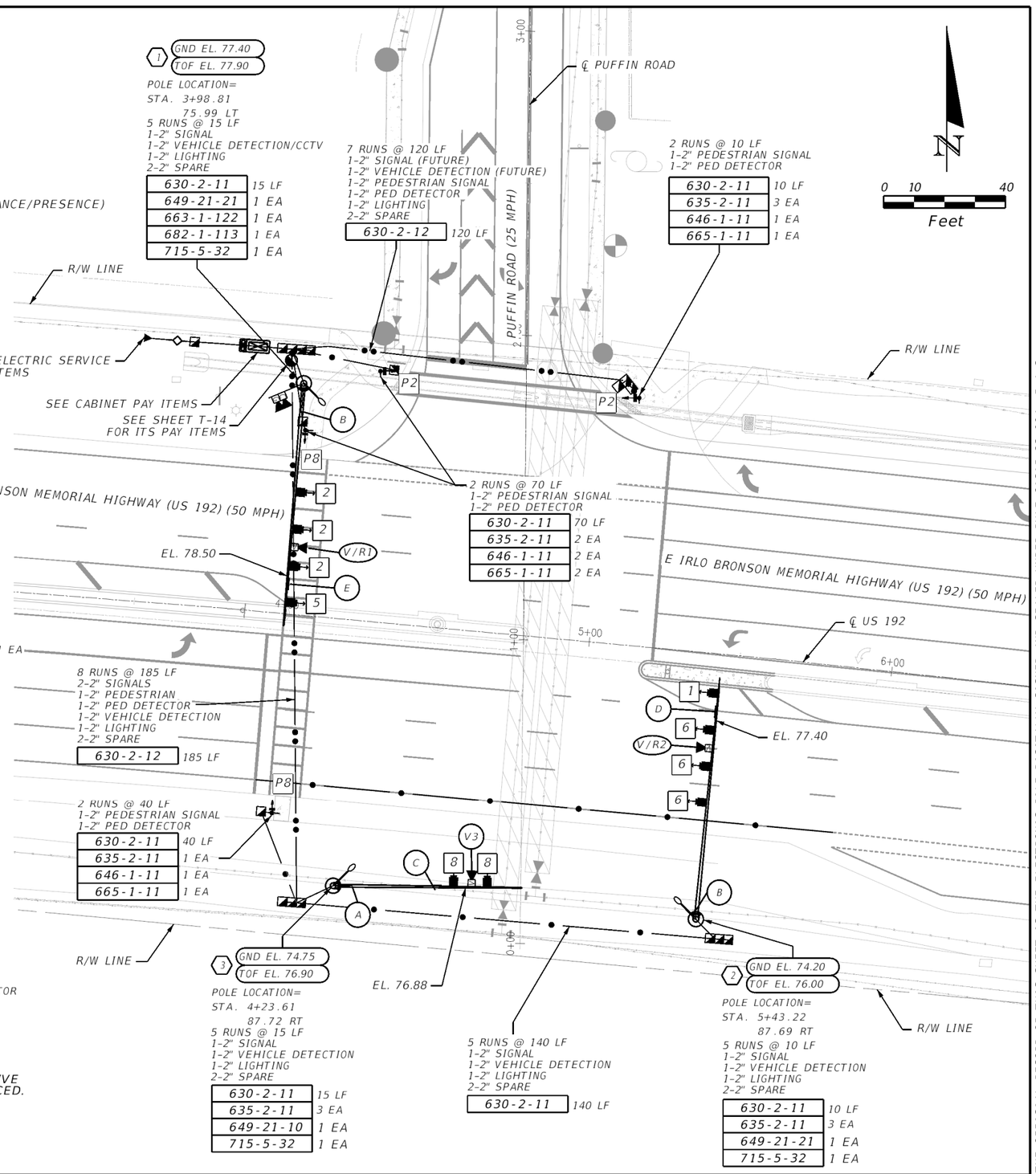
2 RUNS @ 50 LF
1-2" ELECTRIC SERVICE
1-2" SPARE

630-2-11	50 LF
635-2-11	1 EA
639-1-122	1 AS
639-2-1	50 LF
639-3-11	1 EA
641-2-12	1 EA

ELECTRIC SERVICE TO BE FINALIZED WITH ORLANDO UTILITIES COMMISSION PRIOR TO FINAL SUBMITTAL

LIGHTING PAY ITEMS

715-1-12	541 LF, GROUND
715-1-12	1082 LF, CONDUCTOR
715-7-11	1 EA



SIGNALIZATION NOTES:

1. THE MAIN STREET IS US 192 (50 MPH) (MOVEMENTS 1,2,5&6). THE MINOR STREET IS PUFFIN ROAD (25 MPH) (MOVEMENT 8).
2. DURING FLASH OPERATION, MOVEMENTS 2&6 SHALL FLASH YELLOW, MOVEMENTS 1,5,&8 SHALL FLASH RED.
3. ALL 4-SECTION SIGNAL HEADS SHALL BE WIRED TO OPERATE IN EITHER PROTECTED ONLY OR PROTECTED/PERMISSIVE MODE. THE PERMISSIVE LEFT TURN PHASE SHALL BE TERMINATED WHEN A CONFLICTING PED MOVEMENT IS SERVICED.
4. CONTRACTOR TO ENSURE ALL PEDESTRIAN DETECTORS ARE ADJACENT TO A MINIMUM 4'X4' FLAT LANDING WITH A MAXIMUM SLOPE OF 2%.
5. CONTRACTOR TO COORDINATE WITH ORLANDO UTILITIES COMMISSION FOR CONNECTION TO ELECTRIC SERVICE.
6. ALL STATIONING IS BASED ON US 192 BASELINE.
7. REFER TO SHEET T-7 FOR DETECTION SETUP AND SHEET T-8 FOR DETECTION CHART.
8. REFER TO SHEET T-14 FOR INTERCONNECT PLAN.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

TRAFFIC & MOBILITY CONSULTANTS LLC
3101 MAGUIRE BLVD, SUITE 265
ORLANDO, FL 32803
OFFICE: (407) 531-5332
FAX: (407) 531-5331
JEREMY M. CROWE, P.E. 77064
CERTIFICATE OF AUTHORIZATION: 30024

OSCEOLA COUNTY

SIGNALIZATION PLAN

SHEET NO. T-7

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

4/19/2024 8:11:47 AM StephanieMandello
P:\22020.3 US 192 & Puffin Rd Sig Des\300 - CADD\2020111111\Signalization\PLANS01.dgn

Osceola County

ECONOLITE

MOVING TRAFFIC FORWARD

US 192 @ Nova Rd - Pepwave - Econolite Type - Cobalt

Controller Timing Plan (MM) 2-1

Plan 1 - "" EL WT SL NT WL ET NL ST

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Min Green	7	20	0	0	0	20	0	7	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	0	0	0	0	7	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	12	0	0	0	0	0	30	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	3.0	0.0	0.0	0.0	3.0	0.0	3.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	45	70	0	0	0	70	0	30	35	35	35	35	35	35	35	35
Max2	30	70	0	0	0	70	0	30	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	5.1	5.1	3.0	3.0	3.0	5.5	3.0	5.1	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	2.0	2.3	1.0	1.0	1.0	2.1	1.0	2.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix K
Osceola County Land Development Code

B. **ACCESS LENGTH & GEOMETRY** Adequate driveway length (or "throat length") is required to provide uninterrupted traffic flow between the street edge of pavement and the parking lot or first turn from the driveway, and to keep traffic conflicts to an acceptable level for incoming and outbound traffic.

C. The throat length shall be designed based on peak traffic volume as shown in Table 4.4.3-2.

Table 4.4.3-2. MIMIMUM THROAT LENGTH

Driveway Traffic Volume	Minimum Throat Length
Low (less than 75 peak hour vehicles in both directions)	50 feet
Medium (75-150 peak hour vehicles in both direction)	85 feet
High (Over 150 peak hour vehicles in both directions)	120 feet

* Or as supported by traffic study access/queuing analyses.

Full access, medium volume and high volume driveways shall approach the street or road with at least two lanes. The area to which the driveway provides access must be sufficiently large to store any vehicles using the driveway and be completely off the right-of-way. It shall also be sufficient size to allow for the necessary functions to be carried out completely on the fronting property. Signalized medium and high volume driveways shall be supported by traffic study access/queuing analyses. These driveways shall be aligned perpendicular with the street median cuts. The County Manager has the authority to allow alternative alignments based on written justification submitted by the developer and if deemed a safe operation. Residential driveways accessing classified roads shall be provided with a turning option to eliminate backing out into the road whenever possible. Driveway gates, if approved, shall be located based on adjacent roadway classification, traffic operations, and any other physical factors which may affect the safety of the operations.

D. **ACCESS ISLANDS** An island or median, constructed within a two-way driveway, shall be curbed. Right-in/right-out separators can be located within right-of-way, a minimum of four (4) feet from the driving lane, and shall be designed with a non-mountable curb. Except for right in/right out separators, islands shall not extend into through street right-of-way. The median extension between the through street right-of-way and pavement shall be striped. Plantings within the right of way or other structures must not encroach into the sight triangle. Plantings that will exceed three point five (3.5) feet at maturity shall be prohibited in the sight triangle. In a right-in/right-out case, the area separating deceleration lanes shall be painted yellow with eighteen inch (18") diagonal stripes. An alternative design may be approved by the County Manager upon demonstration of safe operation

E. **AUXILIARY TURN LANES – WARRANTS AND DESIGN** A development generating more than fifty (50) average daily trips (ADT) may be required to construct auxiliary turn lanes. This requirement depends on a combination of existing and future connection volumes and existing and future roadway volumes. If the future volumes justify the auxiliary lanes, then the developer has the option to enter into an agreement with the County to postpone the improvements until such time as designated by the County.

Table 4.4.3-3. Auxiliary Lanes Thresholds		
GROUP 1	Up to 30 mph and less than 10,000 ADT* or 500 VPH/Lane	No auxiliary lanes required
GROUP 2	Up to 30 mph and more than 10,000 ADT* or 500 VPH/Lane	Right turn not required
	10 VPH and More	Left turn Lane
GROUP 3	35 mph or higher and up to 5,000 ADT* or 250 VPH/Lane	
	Right Turn	
	Up to 20 VPH	Radius 50’
	21-30 VPH	Taper
	31 VPH and More	Lane
	Left Turn	
	20 VPH and More	Lane
GROUP 4	35 mph or higher and more than 5,000 ADT* or 250 VPH/Lane	
	Right Turn	
	10 VPH	Radius 50’
	11-15 VPH	Taper
	16 VPH and More	Lane
	Left Turn	
	15 VPH and More	Lane

*These criteria represent the existing posted speed and existing daily traffic. Vehicles per Hour (VPH) represents peak hour, peak direction. Taper (0 to 12’) shall be one hundred twenty feet (120’) long for 35-45 mph, one hundred fifty feet (150’) long for 50 mph, and one hundred eighty feet (180’) long for 55 mph.

Notwithstanding the table above, the County Manager has the authority to require turn lanes in special conditions even if the thresholds are not met (for safety and operations). The developer may provide a traffic-gap study based on ten (10) year projected volumes to support varying auxiliary lane requirement.

All of the above improvements require pavement overlay and leveling (as needed) within their limits. Improvements adjacent to the property shall require urban sections within the Urban Growth Boundary. The County Manager, upon a written request from the developer and certification of a safe operation, has authority to accept a payment to the roadway fund in lieu of this requirement. This request must be presented to the County Manager with the application submitted for the applicable permit. Payment shall be based on the proportionate share of the development, consistent with this LDC, for the section of roadway adjacent to the property. The County Manager may require operational improvements to ensure safe operations.

F. CAPITAL IMPROVEMENT PLAN If road improvements are included in the County’s annual update of the Capital Improvement Element (CIE), then the developer will be required to escrow the necessary funds. This roadway agreement shall be submitted to the County Manager prior to SDP approval and must be supported by a traffic impact analysis (TIA).

G. SPEED CHANGE LANES The speed change lanes (auxiliary, deceleration, turning) shall be constructed according to the criteria of the FDOT “Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways." Osceola County access guidelines for construction, geometry, signing and striping shall be followed.

H. TURN LANE ALIGNMENT – CONTINUOUS TURN LANE Continuous right turn lanes and left turn lanes shall be constructed if the distance between a lane taper end is closer than the distance traveled during perception and reaction (2-3 seconds). Appropriate striping shall recognize acceleration and deceleration areas. If the taper crosses the existing commercial driveways, right-turn lanes shall be extended a minimum of one hundred (100) feet beyond the driveway. If the distance between the taper end and the next driveway with the turn lane is less than the distance traveled in 2 seconds, then painted bubble and full paved lane width must be used for the auxiliary lanes.

I. SIGHT DISTANCE All driveway/access roads shall satisfy Florida Green book standards for sight distance and FDOT Index 546, as applicable.

Appendix L
LYNX Central Florida Bus Service Map

WELCOME ABOARD!

LYNX operates 80 Links to great places throughout Central Florida. If you don't see your destination here, **CONTACT US** and we can connect you to the right Link for your trip.

Riding LYNX is also easy on your wallet.
You can pay for your trip as you board the bus:

ONE RIDE	ALL-DAY
$2.00 Regular	**$4.50** Regular
$1.00 with LYNX discount fare ID	**$2.25** with LYNX discount fare ID

LYMMO is currently Fare Free.

Please see individual Link schedules for more information.

EXACT FARE REQUIRED
No change given.

Ready to roll? Look inside for more info...

Public Notice of Title VI Rights
The Central Florida Regional Transportation Authority d/b/a LYNX:

- LYNX operates its programs and services without regard to race, color, and national origin in accordance with Title VI of the Civil Rights Act. Any person who believes they have been aggrieved by any unlawful discriminatory practice under Title VI may file a complaint with LYNX.
- For more information on LYNX' Civil Rights Program, and the procedures to file a complaint, contact, 407-841-2279 ext. 6171, email Title6officer@golynx.com, or visit our administrative office at 455 N. Garland Avenue, Orlando, Florida 32801. For more information, visit www.golynx.com.
- Inquiries or complaints related to Title VI may be sent in writing to LYNX Title VI Officer, 455 N. Garland Avenue, Orlando, Florida 32801.
- A complainant may file a complaint directly with the Federal Transit Administration by filing a complaint with the Office of Civil Rights, Attention: Title VI Program Coordinator, East Building, 5th Floor-TCR, 1200 New Jersey Avenue, SE, Washington, DC 20590.
- If information is needed in another language, contact 407-841-2279.

LYNX®

LYNX is the public transit provider for Orange, Osceola and Seminole counties. Additional connectivity with Lake and Polk counties.

CONTACT US for information on fares, bus stops, schedules and trip planning:

407-841-5969 *phone*
golynx.com *web*

THANK YOU FOR RIDING LYNX!

BROCHURE

K KISSIMMEE INTERMODAL STA.

Links 10, 18, 26, 55, 56, 57, 108, 155, FL407, FL441, 612, NL831

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- Florida Mall
- Downtown Orlando
- The Loop
- Meadow Woods SunRail Station
- Plaza Del Sol
- Poinciana
- Sand Lake Road SunRail Station
- St. Cloud
- Tupperware SunRail Station
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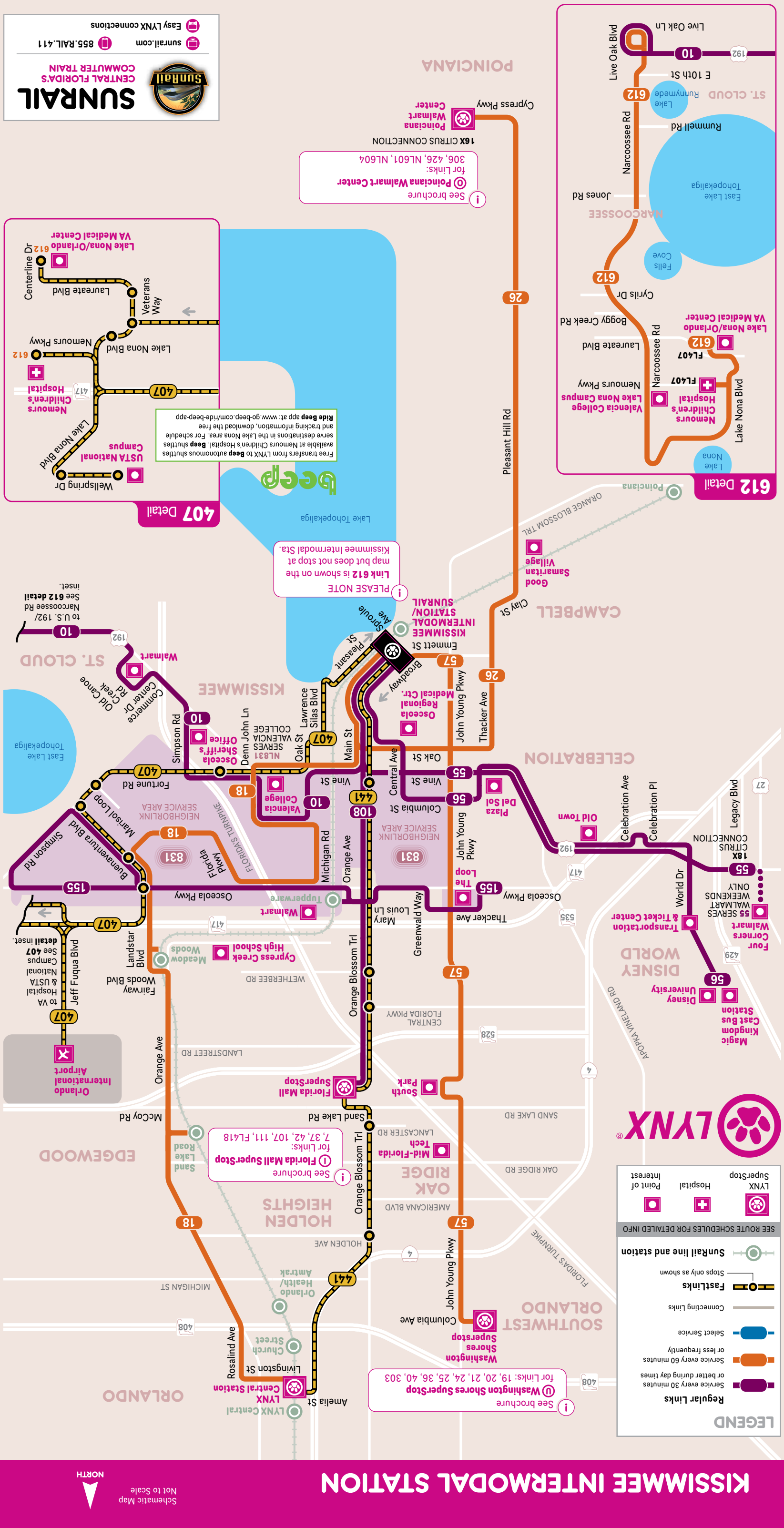
sunrail.com 855.RAIL.411

Easy LYNX connections



BUS SERVICE FREQUENCY

To plan your trip or view full bus schedule visit **golynx.com**

EFFECTIVE DECEMBER 2022 - ALL BUS SERVICE FREQUENCIES ARE APPROXIMATE AND SUBJECT TO CHANGE

Times indicate departures from the BEGINNING of the route. Diagrams show major points on each Link – buses make additional local stops along the way.

10 EASTBOUND to St. Cloud

Kissimmee Intermodal Station → Valencia Comm. College → U.S. 192/ Simpson Rd → St. Cloud Walmart → Narcoossee/ U.S. 192

approximate time away > 15 mins → 24 mins → 37 mins → 54 mins

MINUTES AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		4:05 am	4:05 am	5:05 am
DAY	5 am–9 pm	:00, :30	:00	:00
LAST TRIP		9:00 pm	9:00 pm	9:00 pm

- *Westbound trips at 4:20 am (Mon-Fri), 4:20 am (Sat) and 5:20 am (Sun) start from St. Cloud Walmart.*

10 WESTBOUND to Kissimmee Intermodal Station

Narcoossee/ U.S. 192 → St. Cloud Walmart → U.S. 192/ Simpson Rd → Valencia Comm. College → Kissimmee

approximate time away > 18 mins → 30 mins → 40 mins → 57 mins

MINUTES AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		4:20 am•	4:20 am•	5:20 am•
DAY	5–6 am		:00	:20
	6–7 am	:00, :30	:00, :55	:00, :55
	7 am–2 pm			
	2–6 pm	:00, :35	:55	:55
NIGHT	6–8 pm	:00, :30		
	8–9 pm		:50	
	9–10 pm	:00, :50		
LAST TRIP		9:50 pm	9:50 pm	9:55 pm

18 INBOUND to LYNX Central Station

Kissimmee Intermodal Station → Valencia Comm. College → Meadow Woods SunRail → Sand Lake Road SunRail → Orange Ave/ Michigan St → LYNX Central Sta. - Bay X

approximate time away > 13 mins → 52 mins → 69* mins → 83 mins → 100 mins

MINUTES AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		4:30 am	4:40 am	NO SERVICE
DAY	5–6 am	:35	:40	
	6–8 am	:30		
	8–9 am			
	9 am–12 pm	:25	:35	
	12–3 pm	:30		
	3–4 pm	:35		
	4–5 pm	:40		
	5–6 pm			
EVE	6–7 pm	:35	:45	
	7–10 pm	:25		
LAST TRIP		9:25 pm	9:45 pm	

18 OUTBOUND to Kissimmee Intermodal Station

LYNX Central Sta. - Bay X → Orange Ave/ Michigan St → Sand Lake Road SunRail → Meadow Woods SunRail → Valencia Comm. College → Kissimmee Intermodal Station

approximate time away > 16 mins → 29* mins → 48 mins → 87 mins → 101 mins

MINUTES AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		5:30 am	5:30 am	NO SERVICE
ALL DAY	6 am–7 pm	:30	:30	
LAST TRIP		7:30 pm	7:30 pm	

**All Route 18 trips serve Sand Lake Road SunRail on Weekdays and Orange Ave/Office Ct on Saturdays.*

26 NORTHBOUND to Kissimmee Intermodal Station

Poinciana Walmart → U.S. 17-92/ Pleasant Hill Rd → Kissimmee Intermodal Station

approximate time away > 21 mins → 38 mins

MINUTES AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		5:10 am	6:10 am	6:05 am
DAY	5–6 am	:10, :40	:10	:00
	6–10 am	:05, :35		
	10 am–1 pm	:05		
	1–4 pm	:05, :35		
	4–5 pm	:05, :40		
	5–9 pm	:10, :40		
LAST TRIP		9:10 pm	9:10 pm	9:00 pm

26 SOUTHBOUND to Poinciana Walmart

Kissimmee Intermodal Station → U.S. 17-92/ Pleasant Hill Rd → Poinciana Walmart

approximate time away > 18 mins → 43 mins

MINUTES AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		5:00 am	5:15 am	6:15 am
DAY	5–6 am		:15	--
	6–7 am	:00, :30		:15
	7–9 am			
	9 am–12 pm	:00	:10	:10
	12–8 pm	:00, :30		
EVE	8–9 pm	:00		
LAST TRIP		9:00 pm	9:10 pm	9:05 pm

56 EASTBOUND to Kissimmmee Intermodal Station

Disney University → Transprt. & Ticket Center → U.S. 192/ Old Town → Plaza Del Sol → Kissimmee Intermodal Station

approximate time away > 7 mins → 24 mins → 48 mins → 63 mins

	MON–FRI	SAT	SUN/HOL
FIRST TRIP	6:18 am	6:47 am	6:48 am
THEN SERVICE APPROX. EVERY	**30 mins**	**30 mins**	**30 mins**
LAST TRIP	11:10 pm	11:10 pm	11:13 pm

4:14 am–6:34 am (Mon-Fri) trips operate between Plaza del Sol and Kissimmee only

56 WESTBOUND to Walt Disney World

Kissimmee Intermodal Station → Plaza Del Sol → U.S. 192/ Old Town → Transprt. & Ticket Center → Disney University

approximate time away > 18 mins → 41 mins → 58 mins → 64 mins

MINUTES AFTER THE HOUR	MON–FRI	SAT	SUN/HOL
FIRST TRIP	5:30 am	5:30 am	5:30 am
THEN SERVICE APPROX. EVERY	**30 mins**	**30 mins**	**30 mins**
LAST TRIP	11:00 pm	11:00 pm	11:00 pm

Service interruption at Disney University during fireworks event 8:30-10:30 pm

55 EASTBOUND to Kissimmee Intermodal Station

Cagan Ridge Blvd → Legacy Blvd → U.S. 192/ Old Town → Plaza Del Sol → Kissimmee Intermodal Station

approximate time away > 8 mins → 29 mins → 48 mins → 58 mins

MINUTES AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		6:10 am	6:09 am	6:08 am
DAY	6–7 am	:10, :40	:09, :39	:08, :38
	7–8 am	:10, :35		
	8–9 am	:05, :35	:09, :40	:08, :40
	9–10 am		:10, :38	:08, :37
	10–11am		:07, :37	:07, :36
	11 am–12 pm			:06, :36
	12–1 pm			:06, :35
	1–2 pm		:05, :35	:04, :34
	2–3 pm	:00, :30	:05, :34	:03, :31
	3–4 pm		:04, :30	:01, :31
	4–5 pm	:05, :35	:02, :32	:00, :31
	5–6 pm		:13, :43	:07, :38
	6–7 pm	:10, :40	:08, :38	:08, :38
EVE	7–8 pm	:10, :35		:09, :39
	8–10 pm	:00, :30		:08, :38
LAST TRIP		9:30 pm	9:38 pm	9:38 pm

Trips start from Cagan Ridge Blvd and serve every 30 mins from 6:00 am to 8:00 am and 5:00 pm to 9:30 pm Saturday and Sunday.

57 NORTHBOUND to Washington Shores SuperStop

Kissimmee Intermodal Station → John Young Pkwy/ Osceola Pkwy → South Park Circle → John Young Pkwy/ Americana Blvd → Washington Shores SuperStop

approximate time away > 22 mins → 42 (38 Sat) mins → 54 (48 Sat) mins → 64 (57 Sat) mins

MINUTES AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		5:20 am	5:15 am	NO SERVICE
DAY	6 am–4 pm	:15	:15	
	4–7 pm	:20		
LAST TRIP		7:20 pm	7:15 pm	

57 SOUTHBOUND to Kissimmee Intermodal Station

Washington Shores SuperStop → John Young Pkwy/ Americana Blvd → South Park Circle → John Young Pkwy/ Osceola Pkwy → Kissimmee Intermodal Station

approximate time away > 10 mins → 21 mins → 48 (42 Sat) mins → 67 (59 Sat) mins

MINUTES AFTER THE HOUR	MON–FRI	SAT	SUN/HOL
FIRST TRIP	5:30 am	5:15 am	NO SERVICE
DAY	:30	:15	
LAST TRIP	8:30 pm	8:15 pm	

108 INBOUND to Florida Mall

Kissimmee Intermodal Station → O.B.T./ Hunters Creek Blvd → Florida Mall

approximate time away > 16 mins → 44 mins

MINUTES AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		4:35 am	4:40 am	4:45 am
DAY	5–6 am	:05, :35	:10, :40	:15, :45
	6–9 am	:10, :40		
	9 am–1 pm			:10, :40
	1–6 pm			
	6–7 pm			:10, :45
NIGHT	7–10 pm	:00, :30		:20, :50
LAST TRIP		10:00 pm*	10:10 pm	9:20 pm

** Last trips at 11:10 pm and 12:10 am start from O.B.T./Hunters Creek Blvd (Mon–Fri)*

- *Last trips from Florida Mall at 10:50 pm and 11:50 pm end at O.B.T./Hunters Creek Blvd (Mon-Fri)*

108 OUTBOUND to Kissimmee Intermodal Station

Florida Mall → O.B.T./ Hunters Creek Blvd → Kissimmee Intermodal Station

approximate time away > 26 mins → 43 mins

MINS AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		5:15 am	5:10 am	5:35 am
DAY	5–7 am	:15, :45	:10, :40	:05, :35
	7–8 am	:10, :40		
	8–9 am			:05, :40
	9–11 am			:10, :40
DAY/EVE	11 am–8 pm	:05, :35		
	5 pm only	:10, :40		
NIGHT	8–9 pm	:15, :45		
	9–10 pm			:10, :55
	10–11 pm	:20, :50	:10	--
LAST TRIP		11:50 pm•	10:10 pm	9:55 pm

155 EASTBOUND Tupperware SunRail Station to Osceola Pkwy

Tupperware SunRail Station → Osceola Pkwy/ Simpson Rd → Tupperware SunRail Station

approximate time away > 18-20 mins → 40-42 mins

MINUTES AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		5:20 am	NO SERVICE	NO SERVICE
AM PEAK	5:15–7:45 am	:20, :50		
LAST TRIP		7:45 am		
FIRST TRIP		4:20 pm		
PM PEAK	4:20–6:50 pm	:20, :50		
LAST TRIP		6:50 pm		

155 WESTBOUND Tupperware SunRail Station to The Loop

Tupperware SunRail Station → Dyers Blvd/ Eagle's Reserve Blvd → Tupperware SunRail Station

approximate time away > 15-17 mins → 30-34 mins

MINUTES AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		6:05 am	NO SERVICE	NO SERVICE
AM PEAK	6:05–8:05 am	:05, :35		
LAST TRIP		8:05 am		
FIRST TRIP		4:35 pm		
PM PEAK	4:35–7:05 pm	:05, :35		
LAST TRIP		7:05 pm		

55 WESTBOUND to Legacy Blvd/Four Corners

Kissimmee Intermodal Station → Plaza Del Sol → U.S. 192/ Old Town → Legacy Blvd → Cagan Ridge Blvd

approximate time away > 17 mins → 38 mins → 59 mins → 66 mins

MINUTES AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		5:15 am	5:15 am	5:15 am
DAY	5 am–4 pm	:15, :45	:15, :45	:15, :45
	4–5 pm	:15, :50		
EVENING	5–7 pm	:20, :50		
	7–8 pm	:20, :45		
	8–9 pm	:15, :45		
LAST TRIP		8:45 pm	8:45 pm	8:45 pm

407 WESTBOUND to Kissimmee Intermodal Station

Lake Nona / Orlando VA Medical Ctr. → Orlando International Airport → Kissimmee Intermodal Station

approximate time away > 17 mins → 54 mins

MINUTES AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		6:30 am	6:25 am	NO SERVICE
DAY	7–9 am	:35	:25	
	1–3 pm	:45	:35	
EVE	5–7 pm		:40	
LAST TRIP		7:45 pm	7:40 pm	

407 EASTBOUND to Lake Nona/VA Medical Ctr

Kissimmee Intermodal Station → Orlando International Airport → United States Tennis Association → Lake Nona / Orlando VA Medical Ctr.

approximate time away > 38 mins → 54 mins → 66 mins

MINUTES AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		5:30 am	5:30 am	NO SERVICE
DAY	6–8 am	:30	:30	
	12–2 pm			
	4–6 pm			
LAST TRIP		6:30 pm	6:30 pm	

441 INBOUND to LYNX Central Station

Kissimmee Intermodal Station → O.B.T./ Central FL. Pkwy → Florida Mall SuperStop → O.B.T/ 45th St → LYNX Central Sta. - Bay D

approximate time away > 24 mins → 35 mins → 46 mins → 61 mins

MINUTES AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		6:00 am	NO SERVICE	NO SERVICE
DAY	6 am–1 pm	:50		
	1–5 pm	:45		
	5–6 pm	:50		
LAST TRIP		5:50 pm		

441 OUTBOUND to Kissimmee Intermodal Station

LYNX Central Sta. - Bay D → O.B.T/ 45th St → Florida Mall SuperStop → O.B.T./ Central FL. Pkwy → Kissimmee Intermodal Station

approximate time away > 14 mins → 27 mins → 38 mins → 60 mins

MINUTES AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		6:05 am	NO SERVICE	NO SERVICE
DAY	6 am–2 pm	:05		
	2–6 pm	:00		
LAST TRIP		6:00 pm		

612 NORTHBOUND to Lake Nona

Narcoossee Rd/ U.S. 192 → Narcoossee Rd/ Cyrils Dr → Hartwell Ct/ Laureate Blvd

approximate time away > 16 mins → 44 mins

MINS AFTER THE HOUR	MON–FRI	SAT	SUN
FIRST TRIP	5:05 am	5:05 am	6:05 am
ALL-DAY	:05	:05	:05
LAST TRIP	9:05 pm	9:05 pm	9:05 pm

612 SOUTHBOUND to U.S. 192/Narcoossee Rd

Hartwell Ct/ Laureate Blvd → Narcoossee Rd/ Cyrils Dr → Narcoossee Rd/ U.S. 192

approximate time away > 30 mins → 47 mins

MINS AFTER THE HOUR	MON–FRI	SAT	SUN
FIRST TRIP	5:05 am	5:05 am	5:05 am
ALL-DAY	:00	:05	:00
LAST TRIP	9:00 pm	9:00 pm	9:00 pm

831 NEIGHBORLINK North Kissimmee / Buena Ventura Lakes

NeighborLink 831 *operates in a service area bordered by Simpson Road, Boggy Creek Road, Osceola Parkway and John Young Parkway with stops at Tupperware SunRail Station and Valencia College Osceola Campus (connect with Links 10 and 18). It will also connect with Links 10, 18, 26, 55, 56, 57, 108, 155 and FastLink 407 and 441 at the LYNX Kissimmee Intermodal Station.*

Passengers must call 407-244-0808 at least two hours in advance to arrange a pickup.

To Tupperware SunRail Station

MINUTES PAST EACH HOUR	MON–FRI	SAT	SUN/HOL
FIRST TRIP	6:35 am	NO SERVICE	NO SERVICE
ALL-DAY	:35*		
LAST TRIP	10:05 pm		

** 30 minute service after 9:35 pm*

To Valencia College Osceola Campus

MINUTES PAST EACH HOUR	MON–FRI	SAT	SUN/HOL
FIRST TRIP	6:20 am	NO SERVICE	NO SERVICE
ALL-DAY	:20		
LAST TRIP	9:30 pm		

CAN'T FIND YOUR LINK?

LYNX has 21 brochures, listed below, to help you find your bus. Each one shows the Links serving a certain area, like Fern Park, or a particular service, like LYMMO. You can also use the table to the right, which shows each Link and the brochure it appears on. Note that some Links are shown on more than one brochure.

LYNX BUS SERVICE BROCHURES

- (A) Apopka SuperStop
- (B) Colonial Plaza SuperStop
- (C) Colonial Dr East/West
- (D) Colonial Dr West/West Oaks Mall
- (E) Destination Parkway
- (F) Dixie Belle Dr & Gatlin Ave
- (G) FastLink Services
- (H) Fern Park SuperStop
- (I) Florida Mall SuperStop
- (K) Kissimmee Intermodal Station
- (L) LYNX Central Station
- (M) LYMMO
- (N) Orlando International Airport
- (O) Poinciana Walmart Center
- (P) Rosemont SuperStop
- (Q) Sanford Seminole Centre
- (R) SunRail Connections
- (S) UCF Area
- (T) Disney Area
- (U) Washington Shores SuperStop
- (V) Winter Park Village Area

QUESTIONS?

Visit us online
golynx.com

Give us a call
407.841.LYNX

Like us on Facebook
facebook.com/golynx

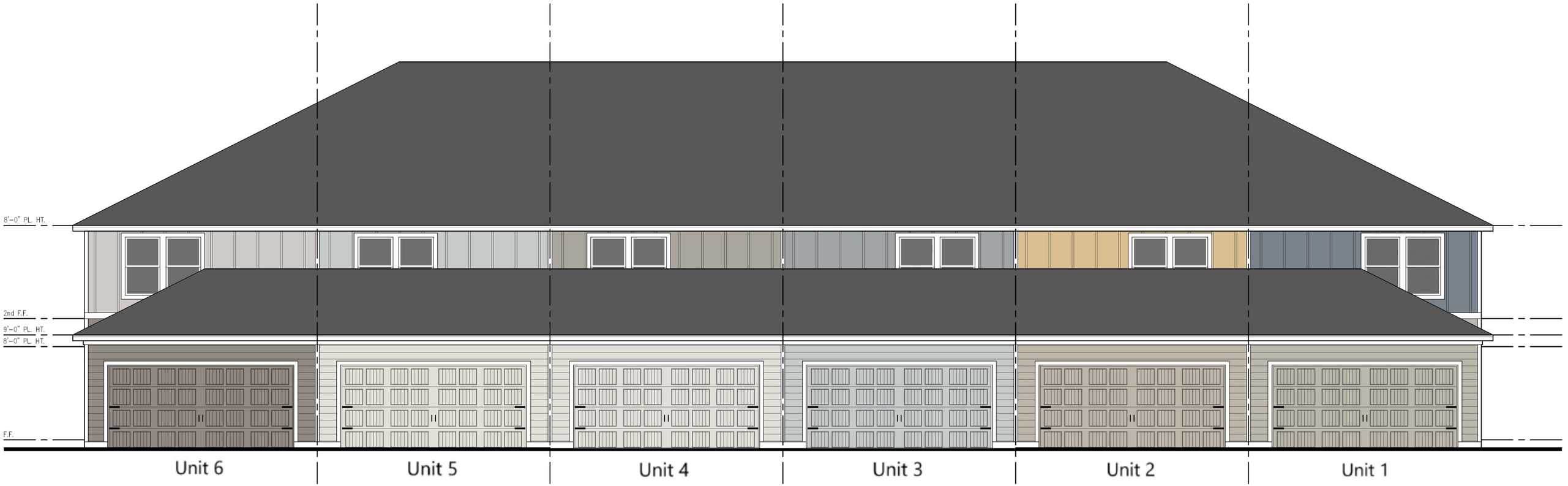
Follow us on Twitter
@lynxbusorlando

Link	Brochure
1	R V
3	F L
6	B F
7	I L
8	E L
9	P R V
10	K
11	L N R
13	B L S
15	L S
18	K L R
19	L U
20	L U
21	L U
23	P R V
24	U
25	L U
26	K O
28	C L
29	C L
34	Q R
36	L U
37	I
38	E L
40	L R U
42	E I N R
44	A
45	Q R
46E	Q R
46W	Q R
48	C L
49	C L
51	B L N
54	D L
55	K
56	K T
57	K U
102	H L R V
103	H Q
104	B C L S
105	C D L
106	A L P
107	I L
108	I K
111	E I N R
125	D L R
155	K R
300	L T
301	T
302	P T
303	T U
304	T
306	O R T
312	D T
320	S
350	E L T
405	A
416	O
426	O
434	R S
436N	A H R
436S	F H N
443	P R V
612	K

Link	Brochure
FastLink	
407	G K N
418	G I R
441	G I K L
LYMMO	
L M	Orange Line
L M	Lime Line
M	Grapefruit Line
NeighborLink	
601	O
603	O
604	O R
621	S
641	E
652	A H R V
811	D
812	C D
813	D
822	S
831	K R
851	Q R

LENNAR

Harvest Grove - 20ft Alley Loaded



6-Plex Building - Rear Elevation

LENNAR

Harvest Grove - 20ft Alley Loaded



Unit 1



Unit 6

6-Plex Building - Right and Left Elevation

LENNAR®

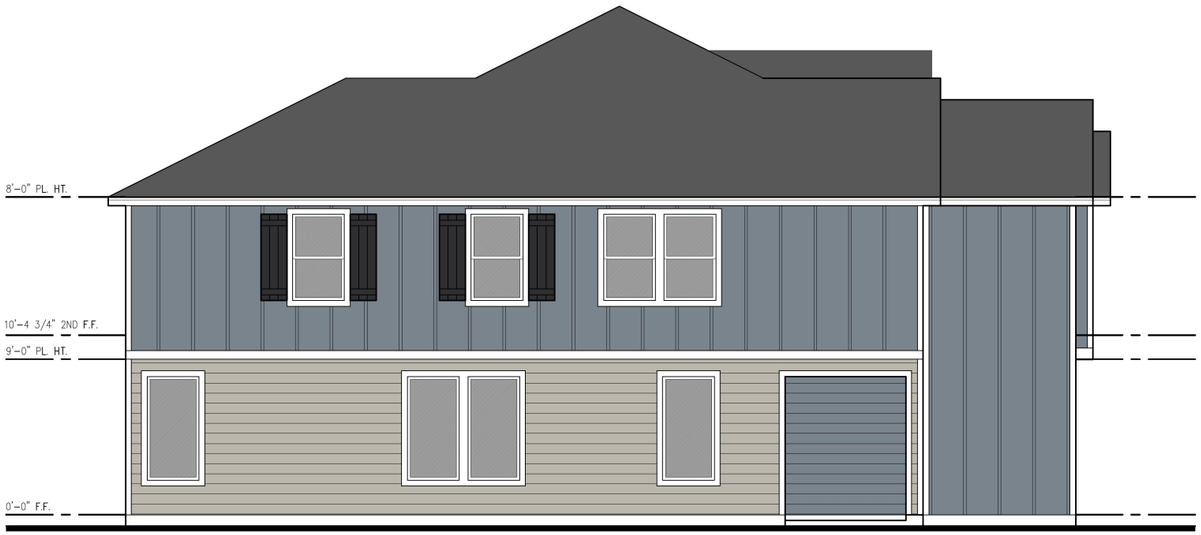
Harvest Grove - 25ft Front Loaded



6-Plex Building - Rear Elevation

LENNAR

Harvest Grove - 25ft Front Loaded



Unit 1



Unit 6

6-Plex Building - Side Elevation

Meeting: November 13, 2025

Agenda Item Type: Public Hearings
Ordinance No. 2025-72 Cavan Corner FLU

Community Development Agenda Item:
FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-72, an ordinance of the City Council of the City of St. Cloud, Florida, assigning a Future Land Use Designation of approximately +/- 0.42 acres identified as Cavan Corner, Project #CPA25-00009, generally located north of East 12th Street, east of Mississippi Avenue, south of 11th Street and west of Eastern Avenue, from "MDR" Medium Density Residential to "COM" Commercial, providing for amending the official Future Land Use Map of the Comprehensive Plan, filing of the Planning Commission recommendation and proof of publication, applicability and effect, severability, copies on file and effective date. (Above is full title) **ACTION ON ORDINANCE NO. 2025-72**

Strategic Key Focus Areas:
High-Performing Government

Background Information:
The subject property is generally located north of 12th Street, west of Eastern Avenue, south of 11th Street, and east of Mississippi Avenue. The property consists of one parcel totaling approximately +/- 0.42 acres. The parcel is currently designated Medium Density Residential on the Future Land Use Map and is zoned "R-2" Single & Two-Family Dwelling District under the City's Zoning Map.

Concurrently, the applicant is requesting a Zoning Map Amendment (ZMA25-00013 / Ordinance No. 2025-73) from "R-2" Single & Two-Family Dwellings to "BC" Business Commercial to allow for the development of a potential convenience or hardware store.

Legal Authority:
Per section 1.3.7 of the Land Development Code, The City Council shall review the recommendation from the Planning Commission and render a decision based on the recommendation and information presented. The Planning Commission recommendation is based on the 16 required findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant responses to the 16 required findings have been provided as an attachment for the City Council's review.

Budget and Recommendation:
There is no cost associated with this item.

On October 21, 2025, the Planning Commission – Motion to recommend approval by Douglas. Seconded by Alexander. Passed 5-0.

Staff reviewed this request for a Comprehensive Plan Amendment on or before September 11,

2025, with no objections. Therefore, staff recommends **APPROVAL** of the request for Comprehensive Plan Amendment for Ordinance No. 2025-72.

Finance Director's Comments:
N/A

Procurement Director's Comments:
N/A

City Manager's Comments:
City Manager recommends approval

City Council Action:
11/13/25- Final Action
10/9/25 - Motion to approve the First Reading & Introduction by Urban. Seconded by Paul. Passed 4-0

Attachments:
1. 1 CPA25-00009 Cavan Corner Staff Report CC 11.13.25
2. 2 CPA25-00009 Cavan Corner Ordinance No. 2025-72 CC 11.13.25
3. 3 CPA25-00009 OC SCHOOLS COMMENTS

City Council Staff Report
Meeting Date: November 13, 2025

DRC Case No. /Ord. No.
CPA25-00009/2025-72

Type of Application
Comprehensive Plan Amendment

Case Name
Cavan Corner

Applicant/Owners
Jeremy M. Kibler/ KDA Engineering
Michael J. Reilly / Reilly Holding, Inc.

Address/Location
North of 12th Street, East of Eastern Ave, South of 11th Street, and West of Mississippi Ave.

Parcel ID No(s).
01-26-30-0001-0354-0020

Total Land Area
+/- 0.42 acres

Project Planner
Ralph Keith Jr
Associate Planner



Figure 1 – Aerial Map

Request

The applicant is requesting consideration of a Comprehensive Plan Amendment from Medium Density Residential to Commercial for approximately +/- 0.42 acres of land, as shown in **Figure 1** above.

Background

The subject property is generally located north of 12th Street, west of Eastern Avenue, south of 11th Street, and east of Mississippi Avenue. The property consists of one parcel totaling approximately +/- 0.42 acres. The parcel is currently designated Medium Density Residential on the Future Land Use Map and is zoned "R-2" Single & Two-Family Dwelling District under the City's Zoning Map.

Concurrently, the applicant is requesting a Zoning Map Amendment (ZMA25-00013 / Ordinance No. 2025-73) from "R-2" Single & Two-Family Dwellings to "BC" Business Commercial to allow for the development of a potential convenience or hardware store.

The following table summarizes adjacent Future Land Use designations, Zoning districts and existing uses.

TABLE 2: ZONING & FUTURE LAND USE OF NEIGHBORING PROPERTIES			
Direction	**Zoning**	**Future Land Use**	**Existing Land Use**
North	**"P":** Professional	Commercial	Multi-Story Office Building
East	**"BC":** Business Commercial	Commercial	Single Story Office Building
West	**"R-2":** Single & Two – Family Dwelling	Medium Density Residential	Single Family-Improved
South	**"MH-2":** Residential Manufactured / Mobile Home	Commercial	Mobile Home Park

Figures 2 & 3 below depict the current Future Land Use and Zoning districts within the city.



Figure 2 – Future Land Use Map

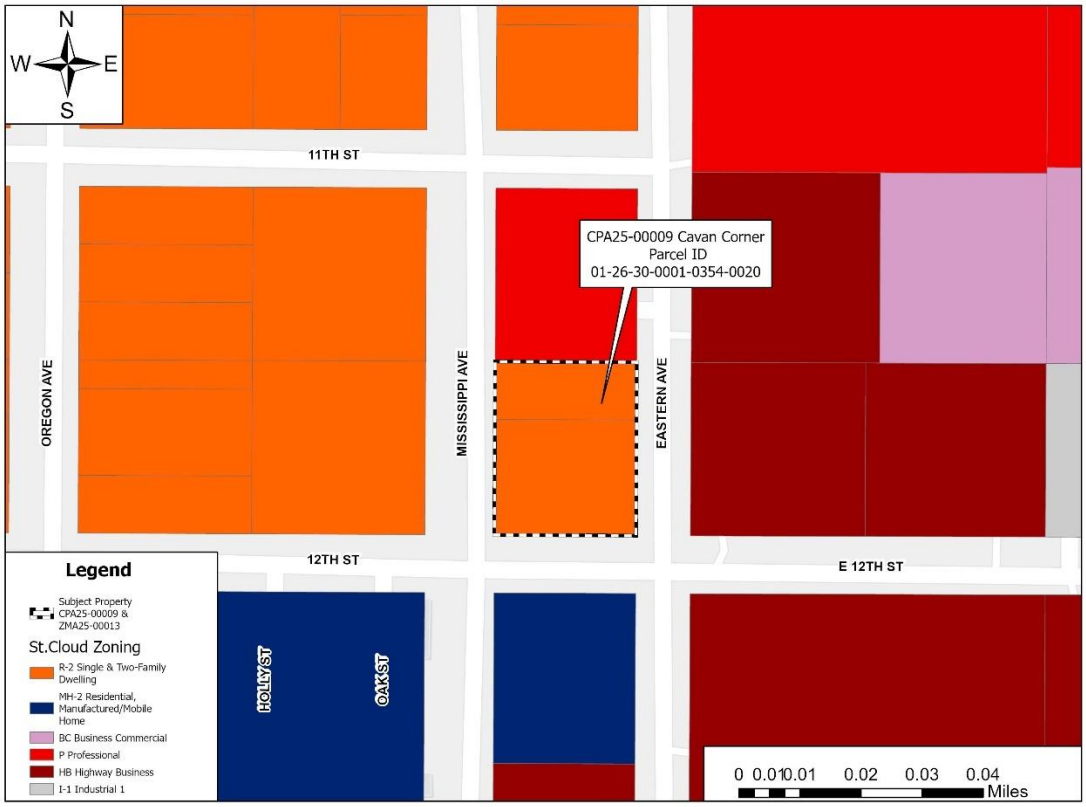


Figure 3 – Zoning Map

Public Notice

Notice of Public Hearing was mailed to property owners within 500 feet of the subject property and was advertised as required by State Statutes. No oral or written comments were received by staff from the public at the time of this report's distribution. Additional public comment may be available at the public hearing.

Findings

Staff has reviewed the applicant's response to the 16 Required Findings of Section 1.3.3.C.2.A of the Land Development Code. The applicant's responses follow the **bolded** LDC language, and staff's comments follow in *italics*:

1. **The proposed change is contrary to the established land use pattern;**

   "The proposed change is consistent and compatible with the existing and trending land use patterns contiguous to, and in close proximity to, the subject property."

   The applicant is requesting a Future Land Use change from Medium Density Residential to Commercial. This request does not significantly conflict with the established land use pattern as the Commercial Future Land Use designation currently exists for the parcels to the north, south, and east of the subject property.

2. **The proposed change would create an isolated district unrelated to the adjacent and nearby districts;**

   "The proposed change would bring uniformity to, complete and extend existing similar districts, and actually eliminate a currently existing isolated residential district."

   The proposed change would not create an isolated district. The proposed Comprehensive Plan Amendment will establish continuity between the Commercial designations to the north and south of the subject property and allow for a more consistent transition between the Commercial to the east and the Medium Density Residential to the west.

3. **The proposed change would materially alter the population density pattern and thereby increase or overtax the load on public facilities such as schools, utilities, streets, etc.;**

   "The proposed change is a commercial infill property, utilizing existing infrastructure and is expected to reduce vehicle trip ends by providing goods/services to the surrounding area."

   The proposed change will not materially affect population density, as the property is being converted from medium density residential to low-intensity commercial. The school capacity report stated that the proposed change would not have any impact.

4. **Existing district boundaries are illogically drawn in relation to existing conditions on the property proposed for change;**

   "The proposed change is consistent and compatible with the existing and trending land use patterns, and the location is appropriate for the proposed use."

   The existing district boundary is not illogically drawn since the proposed land use change is consistent with the surrounding area and extends the Commercial Future Land Use that currently exists to the north. Figure 2 depicts that most of the land use surrounding the subject property is for commercial development.

5. **The proposed change would be contrary to the land use plan and would have an adverse effect on the comprehensive plan;**

   "The proposed change is consistent and compatible with the city's land use plan, comprehensive plan, and existing city land uses to the north, south, and east.*"*

   The proposed change would not have an adverse effect on the Comprehensive Plan. Policies within the Future Land Use Element of the Comprehensive Plan aim to encourage commercial growth to fulfill the City's strategic goal of increasing its commercial tax base.

6. **Change or changing conditions make the passage of the proposed amendment necessary;**

   "The proposed amendment would bring uniformity to the subject area driven and dominated by well-placed and historically successful commercial and industrial land uses."

   The proposed Commercial Future Land Use Designation is compatible with the existing land use patterns in the area and is consistent with the commercial developments to the north, east, and south.

7. **The proposed change will adversely influence living conditions in the neighborhood;**

"The subject property is the southern portion of an entirely commercial block. Any related development will be in compliance with the city's LDC and provisions preventing such."

The proposed change should not adversely influence living conditions in the neighborhood and are consistent with the development in the area.

8. **The proposed change will create or excessively increase traffic congestion or otherwise affect public safety;**

"The subject property has direct access and frontage on three established local streets and is highly connected and cross-connected to an existing arterial transportation network."

Any increase in traffic or impact on public safety shall be mitigated through the collection of mobility and public safety impact fees. Furthermore, a Traffic Impact Analysis shall be required upon submittal of a Site Development Plan to ensure safe and efficient traffic flows. Any impacts identified in the Traffic Impact Analysis will need to be mitigated by the applicant or property owner prior to any approvals.

9. **The proposed change will create a drainage problem;**

"The proposed change is not anticipated to create a drainage problem. Any related development will be in compliance with local, state, and federal regulations"

Pursuant to Chapter 6 of the Land Development Code, stormwater management systems should be provided for all areas of development and accommodate the runoff that flows into or across the development area without additional flooding of any other lands. Any proposed stormwater system will be reviewed during the Site Development Plan process.

10. **The proposed change will seriously reduce light or air to adjacent areas;**

"The proposed change is not anticipated to seriously reduce light or air to adjacent areas. Any related development will be in compliance with local, state, and federal regulations"

The proposed change should not reduce light or air to adjacent areas. However, design standards will be implemented during review of the Site Development Plan and any other approvals required by the Land Development Code to mitigate any possible impacts.

11. **The proposed change will adversely affect property values in the adjacent area;**

"The proposed change is not anticipated to adversely affect property values in the immediate area."

The proposed change should not adversely impact on property values of the adjacent area.

12. **The proposed change will be a deterrent to the improvement or development of adjacent property in accordance with existing regulations;**

"The proposed change is consistent and compatible with either adjacent and existing development or adjacent and existing uses and districts as governed by city regulations."

This proposed Comprehensive Plan Amendment request should not hinder the improvement of adjacent properties, as the surrounding neighborhood is fully developed. The request to change to commercial represents a natural transition to limited commercial activity. This transition creates cohesiveness with the City's Future Land Use Map and aligns with the commercial designations of parcels located to the north, east, and south.

13. **The proposed change will constitute a grant of special privilege to an individual owner as contrasted with the public welfare;**

    "The proposed change is consistent with the goals, objectives, and policies of the city of saint cloud comprehensive plan and land development code."

    The proposed Comprehensive Plan Amendment does not grant special privilege to an individual owner, developer, or contrast with public welfare.

14. **There are substantial reasons why a reasonable use of property cannot be accomplished under existing zoning.**

    "The existing zoning would be non-conforming and in conflict with the city's comprehensive plan with regard to the requested and appropriate designation of commercial."

    The proposed use would not be supported by the existing Medium Density Residential Future Land Use designation. In order for the applicant to use the subject property as desired, they must rezone to a more compatible commercial zoning. However, a Zoning Map Amendment would not be approved without the compatible Future Land use to exist with it. The concurrent Zoning Map Amendment request triggers the necessity for the Comprehensive Plan Amendment.

15. **Whether the change suggested is out of scale with the needs of the neighborhood or the city;**

    "The proposed change is consistent with the scale of the city, is an infill project, and utilizes adequate and existing infrastructure, facilities, and services."

    The proposed change is not out of scale with the needs of the surrounding neighborhood. The site abuts compatible future land uses to the north, east, and south. Approval of this Comprehensive Plan Amendment would create a natural transition between the residential and commercial designations.

16. **It is impossible to find other adequate sites in the city for the proposed use in districts already zoned for such use.**

    "With urbanization and focus on core services, appropriately and strategically positioned commercial amendments are needed to meet growing needs and efficient use of facilities."

    There are other areas in the City where the proposed Future Land Use designation already exists; however, this property abuts a property with the same designation. This Comprehensive Plan Amendment will be consistent and compatible with the surrounding area and its designations.

Staff Recommendation

Staff reviewed this request for a Comprehensive Plan Amendment on or before September 11, 2025, with no objections. Therefore, staff recommends **APPROVAL** of the request for Comprehensive Plan Amendment for Ordinance No. 2025-72.

Planning Commission Recommendation

Per section 1.3.7 of the Land Development Code, The City Council shall review the recommendation from the Planning Commission and render a decision based on the recommendation and information presented. The Planning Commission recommendation is based on the 16 required findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant responses to the 16 required findings have been provided as an attachment for the City Council's review.

On October 21, 2025, the Planning Commission – Motion to recommend approval by Douglas. Seconded by Alexander. Passed 5-0

City Council Requested Action

The City Council shall review the recommendation from the Planning Commission and render a decision based on the recommendation and information presented. The Planning Commission recommendation is based on the 16 required findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant responses to the 16 required findings have been provided as an attachment for the City Council's review.

On October 9, 2025 – Motion to approve the First Reading & Introduction by Urban. Seconded by Paul. Passed 4-0.

Attachments

- Ordinance No. 2025-72
- School Capacity Report

RETURN TO:
CITY OF ST. CLOUD
DEPT OF COMMUNITY DEVELOPMENT
1300 9TH STREET
ST. CLOUD, FL 34769

ORDINANCE NO. 2025-72

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, ASSIGNING A FUTURE LAND USE DESIGNATION OF APPROXIMATELY +/- 0.42 ACRES IDENTIFIED AS CAVAN CORNER, PROJECT #CPA25-00009, GENERALLY LOCATED NORTH OF EAST 12TH STREET, EAST OF MISSISSIPPI AVENUE, SOUTH OF 11TH STREET AND WEST OF EASTERN AVENUE, FROM "MDR" MEDIUM DENSITY RESIDENTIAL TO "COM" COMMERCIAL, PROVIDING FOR AMENDING THE OFFICIAL FUTURE LAND USE MAP OF THE COMPREHENSIVE PLAN, FILING OF THE PLANNING COMMISSION RECOMMENDATION AND PROOF OF PUBLICATION, APPLICABILITY AND EFFECT, SEVERABILITY, COPIES ON FILE AND EFFECTIVE DATE.

WHEREAS, Chapter 163.3167, Florida Statues, and Article VII, of the Charter Laws of the City of St. Cloud, allows the Council of the City of St. Cloud to prepare and enforce a Comprehensive Plan, and under such authority only lawful procedures and requirements have been met; and,

WHEREAS, the City adopted the Comprehensive Plan pursuant to Chapter 163, Florida Statutes, by Ordinance 2002-41, on September 26, 2002; and,

WHEREAS, pursuant to Chapter 163.3162, Florida Statutes, the City Council of the City of St. Cloud has determined it necessary and desirable to adopt the amended version of the City of St. Cloud, Florida, Comprehensive Plan; and,

WHEREAS, this Ordinance is enacted under the authority of Chapter 163.3161 through 163.3215, Florida Statutes, and Chapter 166, Florida Statutes, as amended, reserving to the City Council of the City of St. Cloud all permitted discretionary authority; and,

WHEREAS, the City Council received the recommendation of Planning Commission dated October 21st, 2025 and,

WHEREAS, the City Council has held two (2) public hearings and has produced advertisement and notice on this matter consistent with the requirements of Chapter 163.3187, Florida Statutes, and,

WHEREAS, the City staff has prepared a staff report and will rely on the data as findings of fact to support the map change.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, as follows:

SECTION 1:

All information above is true and correct.

SECTION 2:

The City of St. Cloud, Florida, Comprehensive Plan is amended in the following respects to the properties, identified under Comprehensive Plan Amendment 24-00009, as shown on Exhibit “A”, and described as follows:

Legal Description:

LOTS 2 AND 3, BLOCK 354, THE SEMINOLE LAND & INVESTMENT CO'S (INCORPORATED) MAP OF TOWN OF ST. CLOUD, SECTION 1, TOWNSHIP 26 SOUTH, RANGE 30 EAST, ACCORDING TO THE PLAT THEREOF, RECORDED IN PLAT BOOK "B", PAGE(S) 33 AND 34, OF THE PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA.

Containing a total of 0.42 acres, more or less.

A. The City of St. Cloud Future Land Use Map, 2025, is amended to show the property as “Commercial”,
B. Any and all additional maps of the Comprehensive Plan are amended to show the property;
C. All Goals, Objectives, Policies, and other planning provisions applicable to properties as shown and set forth in the City of St. Cloud, Florida, Comprehensive Plan apply to the property.

SECTION 3:

The City Manager or his/her designee is authorized and directed to promptly enter changes on the Official Future Land Use Map.

SECTION 4:

Upon adoption of this ordinance, the Planning Commission recommendation and “Proof of Publication” of the required Public Hearing notices shall be filed in the Department of Community Development.

SECTION 5:

The applicability and effect of the City of St. Cloud, Florida, Comprehensive Plan shall be as provided by Chapter 163.3161 through 163.3217, Florida Statutes, and this Ordinance, reserving to the City Council of the City of St. Cloud all permitted discretionary authority.

SECTION 6:

The City Clerk, after consultation with the City Attorney, is authorized to correct scrivener's errors found by filing a corrected copy of this ordinance in the official records of the City.

SECTION 7:

If any section or portion of a section of this ordinance proves to be invalid, unlawful, or unconstitutional, it shall not be held to impair the validity, force, or effect of any other section or part of this ordinance.

SECTION 8:

A. A certified copy of the enacting ordinance and any amendments shall be filed with the Clerk of the Circuit Court.

B. A certified copy of the enacting ordinance, as well as certified copies of the City of St. Cloud, Florida, Comprehensive Plan and any amendments, shall be on file and made available to the public in the office of the City Clerk of the City of St. Cloud, Florida.

C. To make the City of St. Cloud, Florida, Comprehensive Plan available to the public, a certified copy of the enacting ordinance, as well as certified copies of the City of St. Cloud, Florida, Comprehensive Plan and any amendments, shall be located in the Department of Community Development of the City of St. Cloud. The Department of Community Development shall also make copies available to the public for a reasonable publication charge.

SECTION 9:

Effective Date. This ordinance has been published and shall take effect as provided by law.

First Reading on the 9th day of October 2025.

Final Reading on the 13th day of November 2025.

CITY OF ST. CLOUD

_____

Christian B. Robertson, Mayor

ATTEST:

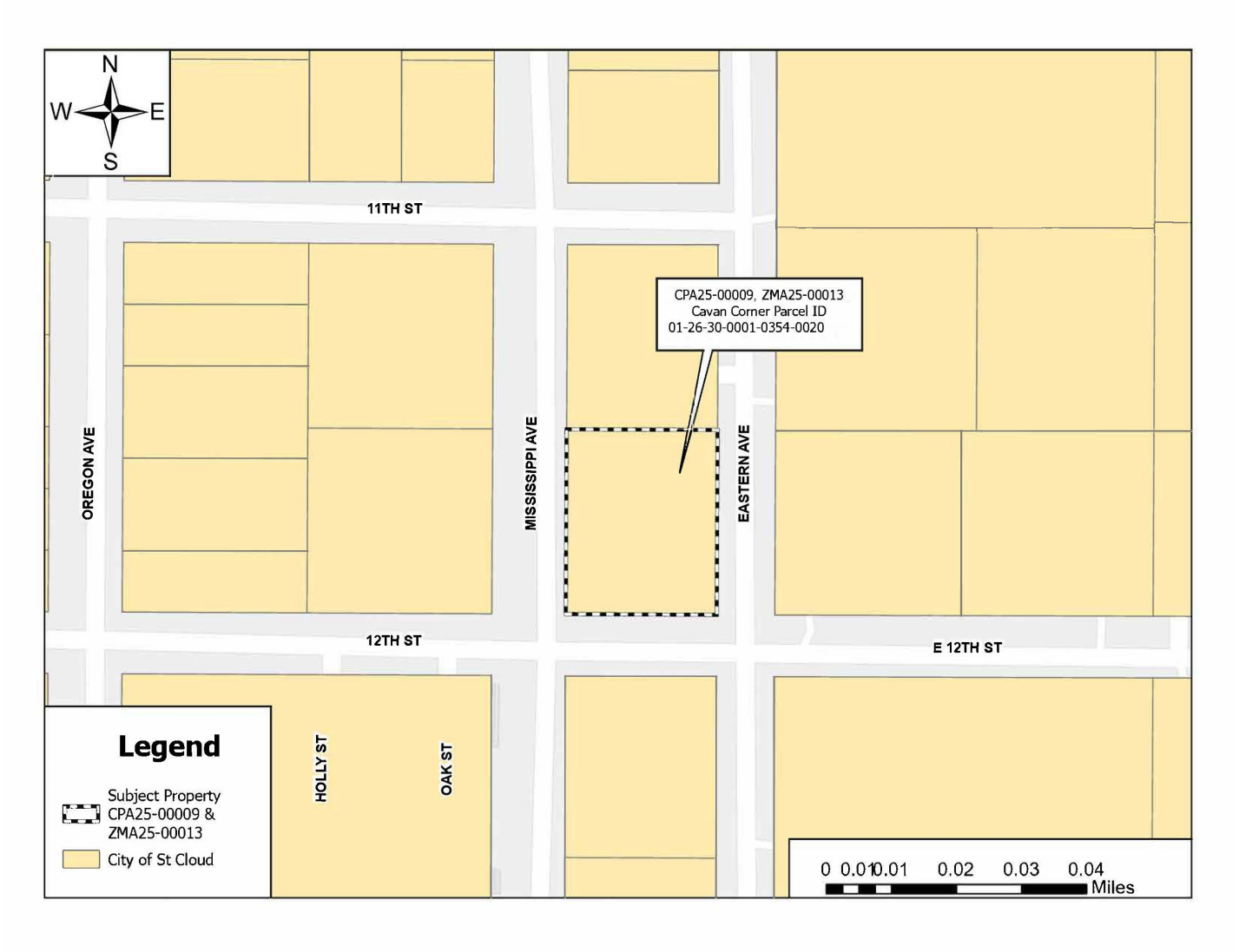
Ivy Llauro, City Clerk

LEGAL IN FORM AND VALID IF ADOPTED:
de beaubien, Simmons, Knight, Mantzaris & Neal LLP

Daniel F. Mantzaris, City Attorney

Pursuant to Section 695.26 (3) (f), this instrument exempt from Chapter 695, F.S.: Prepared by and return to a Public Official: City Manager, City of St. Cloud; 1300 9th Street; St. Cloud, Florida 34769

EXHIBIT "A"



PARCEL ID NO.

01-26-30-0001-0354-0020

THE SCHOOL DISTRICT OF OSCEOLA COUNTY, FLORIDA
PLANNING SERVICES DEPARTMENT
SCHOOL CAPACITY REPORT

SDOC#: 2025/26-0020

DRC#: CPA25-00009

Current FLU: MDR
Requested FLU: COMM

PROJECT NAME: Cavan Corner

Current Zoning: R-2
Requested Zoning: BC

PROJECT LOCATION: 12th Street, St. Cloud, 34769

COMMENTS DUE DATE: 8.25.25

PID: 01-26-30-0001-0354-0020

This CPA application for commercial retail development has no impact on public school capacity.

Meeting: November 13, 2025

Agenda Item Type: Public Hearings
Ordinance No. 2025-73 Cavan Corner ZMA

Community Development Agenda Item:
FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-73, an ordinance of the City Council of the City of St. Cloud, Florida, providing for the Zoning Amendment of the Zoning Map of the Land Development Code of the City of St. Cloud, Florida, specifically changing the zoning designation of approximately +/- 0.42 acres identified as Cavan Corner Project #ZMA25-00013, from "R-2" Single & Two-Family Dwelling to "BC" Business Commercial, generally located north of East 12th Street, east of Mississippi Avenue, south of 11th Street and west of Eastern Avenue, providing for entering the designation on the official Zoning Map, filing of the Planning Commission recommendation and proof of publication, severability, and effective date. (Above is full title) **ACTION ON ORDINANCE NO. 2025-73** (This is a Quasi-Judicial proceeding)

Strategic Key Focus Areas:
High-Performing Government

Background Information:
The subject property is generally located north of 12th Street, west of Eastern Avenue, south of 11th Street, and east of Mississippi Avenue. The property consists of one parcel totaling approximately +/- 0.42 acres in size. The parcel is currently designated Commercial on the Future Land Use Map and is zoned "R-2" Single & Two-Family Dwelling District under the City's Zoning Map.

The R-2 zoning district is intended to accommodate single-family detached dwellings, duplexes, and other compatible residential uses. The applicant is requesting a zoning map amendment to "BC" Business Commercial to allow for the development of a potential convenience or hardware store.

The "BC" district is generally intended to provide areas for commercial activities that serve both the local community and the traveling public, typically located along major roadways and transportation corridors.

Legal Authority:
Per section 1.3.7 of the Land Development Code, The City Council shall review the recommendation from the Planning Commission and render a decision based on the recommendation and information presented. The Planning Commission recommendation is based on the 16 required findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant responses to the 16 required findings have been provided as an attachment for the City Council's review.

Budget and Recommendation:

There is no cost associated with this item.

On October 21, 2025, the Planning Commission – Motion to recommend approval by Douglas. Seconded by Bridgeforth. Passed 5-0

Staff reviewed this request for a Zoning Map Amendment on or before September 11, 2025, with no objections. Therefore, staff recommends **APPROVAL** of Ordinance No. 2025-73 for a Zoning Map Amendment from “R-2” Single & Two-Family Dwelling to “BC” Business Commercial for approximately +/- 0.42 acres of land, subject to the permissible uses provided in the attached ordinance.

Finance Director's Comments:
N/A

Procurement Director's Comments:
N/A

City Manager's Comments:
City Manager recommends approval

City Council Action:
11/13/25 - Final Action
10/09/25 - Motion to approve the First Reading & Introduction by Paul. Seconded by Urban. Passed 4-0.

Attachments:
1. 1 ZMA25-00013 CAVAN CORNER STAFF REPORT CC 11.13.25
2. 2 ZMA25-00013 CAVAN CORNER ORDINANCE NO. 2025-73 CC 11.13.25
3. 3. ZMA25-00013 OC SCHOOLS COMMENTS

City Council Staff Report
Meeting Date: November 13, 2025

DRC Case No. /Ord. No.
ZMA25-00013 /2025-73

Type of Application
Zoning Map Amendment

Case Name
Cavan Corner

Applicant/Owners
Jeremy M. Kibler/ KDA Engineering
Michael J. Reilly / Reilly Holding, Inc.

Address/Location
North of 12th Street, East of Eastern Ave, South of 11th Street, and West of Mississippi Ave.

Parcel ID No(s).
01-26-30-0001-0354-0020

Total Land Area
+/- 0.42 acres

Project Planner
Ralph Keith Jr
Associate Planner



Figure 1 – Aerial Map

Request

The applicant is requesting consideration of a Zoning Map Amendment from "R-2" Single & Two-Family Dwelling to "BC" Business Commercial for approximately +/- 0.42 acres of land. The subject property is shown in **Figure 1** above.

Background

The subject property is generally located north of 12th Street, west of Eastern Avenue, south of 11th Street, and east of Mississippi Avenue. The property consists of one parcel totaling approximately +/- 0.42 acres in size. The parcel is currently designated Commercial on the Future Land Use Map and is zoned "R-2" Single & Two-Family Dwelling District under the City's Zoning Map.

The R-2 zoning district is intended to accommodate single-family detached dwellings, duplexes, and other compatible residential uses. The applicant is requesting a zoning map amendment to "BC" Business Commercial to allow for the development of a potential convenience or hardware store.

The "BC" district is generally intended to provide areas for commercial activities that serve both the local community and the traveling public, typically located along major roadways and transportation corridors.

To ensure compatibility with the surrounding residential neighborhood, the applicant has agreed to staff recommendation of approval with conditions that limits the range of permitted "BC" uses on the subject property. The list of permissible uses is provided with the attached restrictive covenant.

The following table summarizes the development regulations for the requested zoning district according to LDC Section 3.6.1.C & 3.8.1.C - Development/lot requirements.

TABLE 1: R-2 SINGLE & TWO-FAMILY ZONING DISTRICT LOT REQUIRMENTS					
Minimum Site Area (sq. ft.)	***Minimum Lot Width (ft.)***	***Minimum Lot Depth (ft.)***	***Maximum Lot Coverage***	***Maximum Impervious Coverage***	***Maximum Density***
7,500	62.5 1	1,000	50% 2	80%	8

TABLE 2: BUSINESS COMMERCIAL LOT REQUIRMENTS					
Minimum Site Area (sq. ft.)	***Minimum Lot Width (ft.)***	***Minimum Lot Depth (ft.)***	***Maximum Lot Coverage***	***Maximum Impervious Coverage***	***Floor Area Ratio***
11,250	75 (front)	N/A	30%	80%	0.75

The following table summarizes adjacent Future Land Use designations, Zoning districts and existing uses.

TABLE 2: ZONING & FUTURE LAND USE OF NEIGHBORING PROPERTIES			
Direction	**Zoning**	**Future Land Use**	**Existing Land Use**
North	**"P":** Professional	Commercial	Multi-Story Office Building
East	**"BC":** Business Commercial	Commercial	Single Story Office Building
West	**"R-2":** Single & Two – Family Dwelling	Medium Density Residential	Single Family-Improved
South	**"MH-2":** Residential Manufactured / Mobile Home	Commercial	Mobile Home Park

Figures 2 & 3 below depict the current Future Land Use and Zoning districts within the City.



Figure 2 – Future Land Use Map

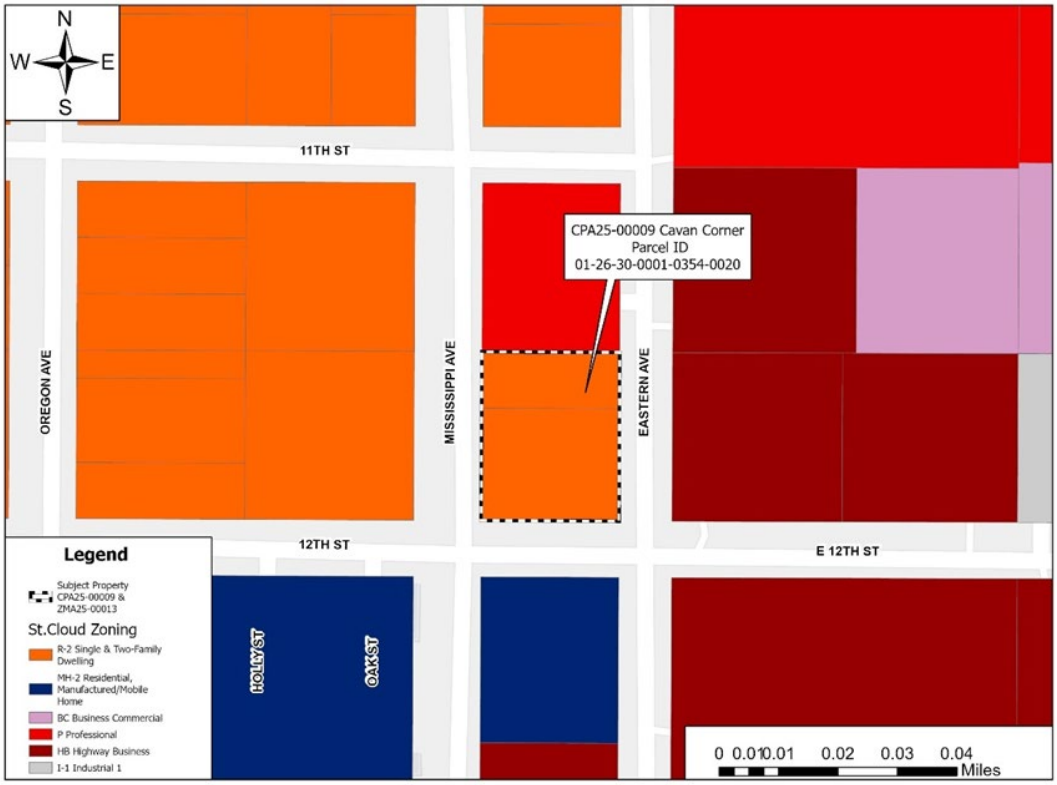


Figure 3 - Zoning Map

Public Notice

Notice of Public Hearing was mailed to property owners within 500 feet of the subject property and was advertised as required by Florida Statutes. Oral comments were received from the public at the time of this report's distribution. Additional public comment may be available at the public hearing.

Findings

Staff reviewed the applicant's response to the 16 Required Findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant's responses follow the **bolded** LDC language, and staff's comments follow in *italics*:

1. **The proposed change is contrary to the established land use pattern;**

   "The proposed change is consistent and compatible with the existing and trending land use patterns contiguous to, and in close proximity to, the subject property."

   The proposed change aligns with both existing and evolving land use patterns. While the area includes residential uses, the subject property is located at the intersection of key corridors and adjacent to other commercial nodes, making it a logical location for limited commercial development that serves surrounding neighborhoods.

2. **The proposed change would create an isolated district unrelated to the adjacent and nearby districts;**

   "The proposed change would bring uniformity to, complete and extend existing similar districts, and actually eliminate a currently existing isolated residential district."

   The proposed change to a Business Commercial zoning will not create an isolated district. Instead, it will complete an emerging commercial pattern already forming along nearby arterial roadways. This change fosters continuity and cohesion with adjacent commercial properties to the north, east, and south.

3. **The proposed change would materially alter the population density pattern and thereby increase or overtax the load on public facilities such as schools, utilities, streets, etc.;**

   "The proposed change is a commercial infill property, utilizing existing infrastructure and is expected to reduce vehicle trip ends by providing goods/services to the surrounding area."

   The proposed request will not materially affect population density. As a non-residential use, the change reduces residential density and the demand on schools. Infrastructure is already available and adequate to support existing development. Any future development will be required to meet all standards related to mobility, drainage, utilities, and school capacity, if required.

4. **Existing district boundaries are illogically drawn in relation to existing conditions on the property proposed for change;**

   "The proposed change is consistent and compatible with the existing and trending land use patterns, and the location is appropriate for the proposed use."

   The existing district boundary is not illogically drawn since the proposed rezoning is consistent with the surrounding area. Figure 3 depicts that most of the zoning districts surrounding the subject property is for commercial development. This request would create consistency and cohesion with the zoning districts to the north, east and south.

5. **The proposed change would be contrary to the land use plan and would have an adverse effect on the comprehensive plan;**

   "The proposed change is consistent and compatible with the city's land use plan, comprehensive plan, and existing city land uses to the north, south, and east."

   The request is consistent with the intent of the Comprehensive Plan to encourage compatible infill development in appropriate areas. It supports economic development and offers neighborhood-scale commercial opportunities without disrupting the residential character of the area.

6. **Change or changing conditions make the passage of the proposed amendment necessary;**

   "The proposed amendment would bring uniformity to the subject area driven and dominated by well-placed and historically successful commercial and industrial land uses."

   The concurrent application for a Comprehensive Plan Amendment requires the Zoning Map Amendment to support the commercial uses and intent of the subject property.

7. **The proposed change will adversely influence living conditions in the neighborhood;**

   "The subject property is the southern portion of an entirely commercial block. Any related development will be in compliance with the city's LDC and provisions preventing such."

   The proposed zoning map amendment should not adversely influence living conditions in the neighborhood. To ensure compatibility with the surrounding residential neighborhood, the applicant has agreed to a restrictive covenant that limits the permitted uses within this zoning district. The restrictive covenant will prohibit certain higher intensity or incompatible commercial activities while allowing the proposed use and other low-intensity commercial options.

8. **The proposed change will create or excessively increase traffic congestion or otherwise affect public safety;**

   "The subject property has direct access and frontage on three established local streets and is highly connected and cross-connected to an existing arterial transportation network."

   Any increase in traffic or impact on public safety shall be mitigated through the collection of mobility and public safety impact fees. Furthermore, a Traffic Impact Analysis shall be required upon submittal of a Site Development Plan to ensure safe and efficient traffic flows. Any impacts identified in the TIA will need to be mitigated by the applicant or property owner prior to any approvals.

9. **The proposed change will create a drainage problem;**

   "The proposed change is not anticipated to create a drainage problem. Any related development will be in compliance with local, state, and federal regulations"

   Pursuant to Chapter 6 of the Land Development Code, stormwater management systems should be provided for all areas of development and accommodate the runoff that flows into or across the development area without additional flooding of any other lands. Any proposed stormwater system will be reviewed during the Site Development Plan or Subdivision Construction Plan process.

10. **The proposed change will seriously reduce light or air to adjacent areas;**

    "The proposed change is not anticipated to seriously reduce light or air to adjacent areas. Any

related development will be in compliance with local, state, and federal regulations"

The proposed change should not reduce light or air to adjacent areas. However, design standards will be implemented during review of the Site Development Plan and any other approvals required by the Land Development Code to mitigate any possible impacts.

11. The proposed change will adversely affect property values in the adjacent area;

"The proposed change is not anticipated to adversely affect property values in the immediate area."

The proposed change should not adversely impact on property values of the adjacent area. It complements the existing Commercial uses to the north, east, and south of the surrounding area.

12. The proposed change will be a deterrent to the improvement or development of adjacent property in accordance with existing regulations;

"The proposed change is consistent and compatible with either adjacent and existing development or adjacent and existing uses and districts as governed by city regulations."

This proposed Comprehensive Plan Amendment request should not hinder the improvement of adjacent properties, as the surrounding neighborhood is fully developed. Rather than deterring development, this change could encourage redevelopment in the area by increasing the mix of uses and adding value to nearby parcels. The transition is compatible with both the zoning and built conditions of the surroundings.

13. The proposed change will constitute a grant of special privilege to an individual owner as contrasted with the public welfare;

"The proposed change is consistent with the goals, objectives, and policies of the city of saint cloud comprehensive plan and land development code."

The proposed Zoning Map Amendment does not grant special privilege to an individual owner, developer, or contrast with public welfare.

14. There are substantial reasons why a reasonable use of property cannot be accomplished under existing zoning.

"The existing zoning would be non-conforming and in conflict with the city's comprehensive plan with regard to the requested and appropriate designation of commercial."

The proposed use would not be permissible in the "R-2" Zoning District since the development consistent with the applicant's request would be considered non-conforming. With the limited Business Commercial uses, the applicant would be able to use the property as desired while still protecting the character of the surrounding neighborhood.

15. Whether the change suggested is out of scale with the needs of the neighborhood or the city;

"The proposed change is consistent with the scale of the city, is an infill project, and utilizes adequate and existing infrastructure, facilities, and services."

The proposed change is not out of scale with the needs of the surrounding neighborhood. While the Business Commercial zoning district allows for a broader range of commercial uses that currently do not exist in the neighborhood, the applicant's restrictive covenant will ensure that the scale and intensity of development will remain compatible.

16. It is impossible to find other adequate sites in the city for the proposed use in districts already zoned for such use.

"With urbanization and focus on core services, appropriately and strategically positioned commercial amendments are needed to meet growing needs and efficient use of facilities."

While similar Zoning Districts exist in other areas of the city, the subject site's position along East 12th Street makes it reasonably suitable for limited commercial use, particularly considering the restrictive covenant limiting the range of uses within this Business Commercial zoning district.

School Capacity Report

The Osceola County School District's School Capacity report stated that this Zoning Map Amendment has no impact on public school capacity.

Consistency With Strategic Plan Goals:

The proposed zoning map amendment meet the intent of the following City of St. Cloud Strategic Goals:

- ***High-Performing Government:*** *Focus on the continuity and sustainability of core public services.*

Staff Recommendation

Staff reviewed this request for a Zoning Map Amendment on or before September 11, 2025, with no objections. Therefore, staff recommends **APPROVAL** of Ordinance No. 2025-73 for a Zoning Map Amendment from "R-2" Single & Two-Family Dwelling to "BC" Business Commercial for approximately +/- 0.42 acres of land, subject to the permissible uses provided in the attached restrictive covenant.

Planning Commission Recommendation

Per section 1.3.7 of the Land Development Code, The City Council shall review the recommendation from the Planning Commission and render a decision based on the recommendation and information presented. The Planning Commission recommendation is based on the 16 required findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant responses to the 16 required findings have been provided as an attachment for the City Council's review.

On October 21, 2025, the Planning Commission – Motion to recommend approval by Douglas. Seconded by Bridgeforth. Passed 5-0

City Council Requested Action

The City Council shall review the recommendation from the Planning Commission and render a decision based on the recommendation and information presented. The Planning Commission recommendation is based on the 16 required findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant responses to the 16 required findings have been provided as an attachment for the City Council's review.

On October 9, 2025 – Motion to approve the First Reading & Introduction by Paul. Seconded by Urban. Passed 4-0.

Attachments

- Ordinance No. 2025-73
- School Capacity Report

RETURN TO:
CITY OF ST. CLOUD
DEPT OF COMMUNTIY DEVELOPMENT
1300 9TH STREET
ST. CLOUD, FL 34769

ORDINANCE NO. 2025-73

AN ORDINANCE NO. 2025-73, AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, PROVIDING FOR THE ZONING AMENDMENT OF THE ZONING MAP OF THE LAND DEVELOPMENT CODE OF THE CITY OF ST. CLOUD, FLORIDA, SPECIFICALLY CHANGING THE ZONING DESIGNATION OF APPROXIMATELY +/- 0.42 ACRES IDENTIFIED AS CAVAN CORNER PROJECT #ZMA25-00013, FROM "R-2" SINGLE & TWO-FAMILY DWELLING TO "BC" BUSINESS COMMERCIAL, GENERALLY LOCATED NORTH OF EAST 12TH STREET, EAST OF MISSISSIPPI AVENUE, SOUTH OF 11TH STREET AND WEST OF EASTERN AVENUE, PROVIDING FOR ENTERING THE DESIGNATION ON THE OFFICIAL ZONING MAP, FILING OF THE PLANNING COMMISSION RECOMMENDATION AND PROOF OF PUBLICATION, SEVERABILITY, AND EFFECTIVE DATE.

WHEREAS, zoning districts are required to be consistent with Comprehensive Plan of the City of St. Cloud; and,

WHEREAS, the proposed zoning is consistent with the existing Future Land Use designation of "Commercial"; and,

WHEREAS, the property described below is less than five percent (5%) of the total land area of the City of St. Cloud; and,

WHEREAS, the City Council has received the recommendation of the Planning Commission dated October 21, 2025; and,

WHEREAS, the City Council has held a Public Hearing on this matter after public notice has been provided, as required by law; and,

WHEREAS, it is in the best interest of the City of St. Cloud and its citizens that the proposed rezoning be approved.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of St. Cloud, Florida, as follows:

SECTION 1:

That Ordinance No. 87-HH of the City of St. Cloud, Florida, passed and adopted October 1, 1987, and any amendments to the ordinance, being the Land Development Code of the City of St. Cloud, Florida, is hereby amended to include and designate on the Official Zoning Map a "BC" Business Commercial zoning district classification for the property described below and as shown on Exhibit "A":

1. Parcel ID 01-26-30-0001-0354-0020

Legal Description

LOTS 2 AND 3, BLOCK 354, THE SEMINOLE LAND & INVESTMENT CO'S (INCORPORATED) MAP OF TOWN OF ST. CLOUD, SECTION 1, TOWNSHIP 26 SOUTH, RANGE 30 EAST, ACCORDING TO THE PLAT THEREOF, RECORDED IN PLAT BOOK "B", PAGE(S) 33 AND 34, OF THE PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA.

CONTAINING 0.42 ACRES, MORE OR LESS.

Including the full width of any and all adjacent rights-of-way.

SECTION 2:

The property is rezoned to "BC" Business Commercial, making applicable all provisions of the Land Development Code of the City of St. Cloud, Florida.

For the purpose of regulating the development of the property within the property, a list of permissible uses shall be memorialized by the applicant through the recording of a restrictive covenant to the deed in the public/private records of Osceola County, shown as Exhibit "B"

SECTION 3:

The City Manager or his/her designee is authorized and directed to promptly enter such change on the Official Zoning Map.

SECTION 4:

Upon adoption of this ordinance, the Planning Commission recommendation and "Proof of Publication" of the required Public Hearing notices shall be filed in the Department of Planning and Zoning.

SECTION 5:

If any section or portion of a section of this ordinance proves to be invalid, unlawful or unconstitutional, it shall not be held to impair the validity, force or effect of any other section or part of this ordinance.

SECTION 6:

The City Clerk, after consultation with the City Attorney, is authorized to correct scrivener's errors found by filing a corrected copy of this ordinance in the official records of the City.

SECTION 7:

Effective Date. This ordinance has been published and shall take effect as provided by law.

First Reading on the 9th day of October 2025.

Second Reading and Final Passage on the 13th day of November 2025.

CITY OF ST. CLOUD

_____
Christian B. Robertson, Mayor

ATTEST:

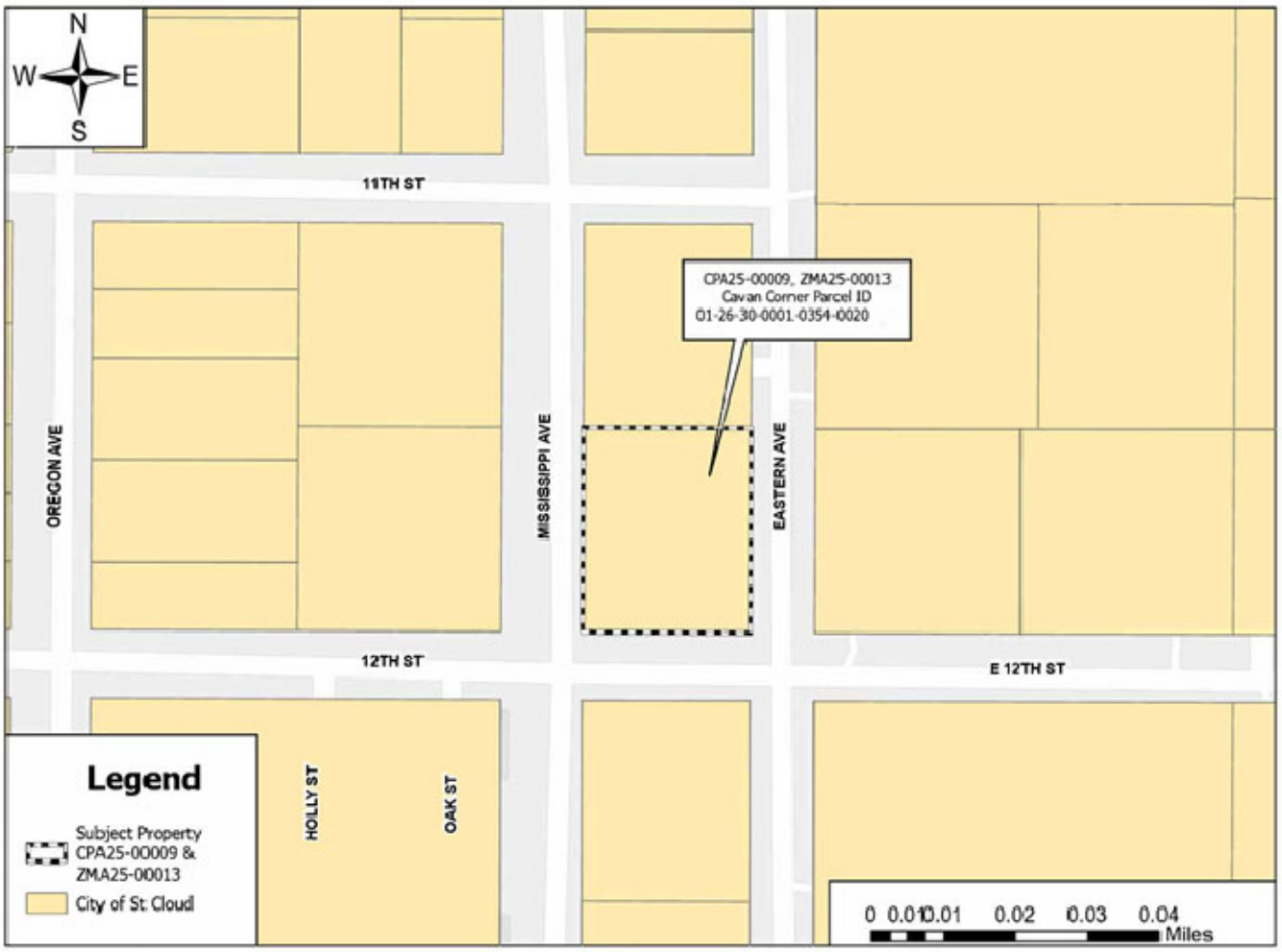
_____
Ivy Llauro, City Clerk

LEGAL IN FORM AND VALID IF ADOPTED:
de Beaubien, Simmons, Knight, Mantzaris & Neal, LLP

_____
Daniel F. Mantzaris, City Attorney

Pursuant to Section 695.26 (3) (f), this instrument exempt from Chapter 695, F.S.: Prepared by and return to a Public Official: City Manager, City of St. Cloud; 1300 9th Street; St. Cloud, Florida 34769

EXHIBIT "A"



PARCEL ID NO(S).
01-26-30-0001-0354-0020

EXHIBIT "B"

Prepared by / Return to:
Reilly Holdings, Inc.
Attn: Michael J. Reilly
3 11th Street
Saint Cloud, FL 34769

RESTRICTIVE COVENANT

THIS RESTRICTIVE COVENANT ("**Covenant**") is made this _____ day of November 2025 ("**Effective Date**") by **Reilly Holdings, Inc.**, a Florida For Profit Corporation ("**Owner**") whose mailing address is 6320 Oak Shore Drive, Saint Cloud, FL 34771.

WHEREAS, Owner owns certain property situated within the Incorporated limits of the City of Saint Cloud, Florida, as more particularly described in **Exhibit "A"** attached hereto and made a part hereof ("**Property**").

WHEREAS, it is the intent of the Owner to establish both the Permitted Uses and the Conditional Uses of record for the subject Property and to record this Covenant to run with title to the Property, pursuant to the terms set forth herein.

NOW THEREFORE, Owner hereby declares that the Property shall be held, sold, and conveyed subject to the following covenants and conditions:

1. **Recitals.** The foregoing recitals are true and correct and incorporated herein.

2. **Use Restriction.** Owner hereby declares that the Property may be developed or used for those Permitted Uses (as designated by "P") and Conditional Uses (as designated by "C") as further identified and set forth in **Exhibit "B"** attached hereto and made a part hereof ("**Use Table**").

3. **Applicability.** This Covenant shall govern the Permitted and Conditional Uses of the Property as identified and set forth in the Use Table. All other zoning

criteria and requirements of the Property shall be governed by those as set forth for the Business Commercial (BC) Zoning District and those as established by the current and effective City of St. Cloud Code of Ordinances and Land Development Code.

4. **Successors, Assigns and Third-Party Beneficiaries.** This Covenant shall run with title to the Property, and shall bind the owners thereof, their respective successors, and assigns. Additionally, the terms hereof shall act for the legal and enforceable benefit of any aggrieved or adversely affected party, person, entity or local government as defined in Section 163.3215, *Florida Statutes* (2025).

5. **Waiver.** Any failure to enforce any provision contained in this Covenant shall in no way be deemed a waiver of the right to do so thereafter.

6. **Section Headings.** The headings preceding the sections of this Covenant are for convenience only and shall not be considered in the construction or interpretation of this Covenant.

7. **Severability.** In case any one or more of the provisions contained in this Covenant shall for any reason be held to be invalid, illegal, or unenforceable in any respect, this invalidity, illegality, or unenforceability shall not affect any other provision of this Covenant and a valid, legal, and enforceable provision shall be agreed upon by the parties and become a part of the Covenant in lieu of the invalid, illegal, or unenforceable provision or in the event a valid, legal, and unenforceable provision cannot be crafted, this Covenant shall be construed as if the invalid, illegal, or unenforceable provision had never been contained herein.

8. **Governing Law and Venue.** This Covenant shall be governed by and construed and enforced under the laws of the State of Florida without giving effect to the rules and principles governing the conflicts of laws. Any action to interpret or enforce the terms or conditions herein shall be exclusively maintained in a court of competent jurisdiction in Osceola County, Florida. Time is of the essence of this Covenant.

9. **Attorney Fees and Costs.** In connection with any litigation or claim arising out of this Covenant, or the breach, enforcement, or interpretation of this Covenant, the prevailing party shall be entitled to recover from the party not prevailing, the prevailing party's reasonable costs and attorney fees, paralegal fees, and expert fees incurred at trial, retrial, on appeal, at hearings, and rehearings, and in all administrative, bankruptcy and reorganization proceedings.

10. **Enforcement.** All parties and third-party beneficiaries shall be entitled to all remedies available at law and equity, including without limitation specific performance, in order to enforce any provision of this Covenant.

11. **Amendment and Termination.** This Covenant may only be amended or terminated (in whole or in part) by the written consent of the Owner and the City City Council of the City of St. Cloud, Florida or as may be provided for by further amendment to the zoning district classification of the Property in accordance with the adopted procedures of the City of St. Cloud and final City Council, of the City of St.Cloud, action and adoption of such amendment.

IN WITNESS WHEREOF, the Owner has signed and executed this Covenant on the respective date set forth herein above.

WITNESSES:

Sign: _____

Print: _____

Sign: _____

Print: _____

OWNER:

Reilly Holdings, Inc.
a Florida Profit Corporation

_____
Michael J. Reilly
President

STATE OF FLORIDA

COUNTY OF _____

The foregoing instrument was Sworn to (or Affirmed) and Subscribed before me, by means of ☐ physical presence or ☐ online notarization, this _____ day of _____, 2025, by Michael J. Reilly, President of Reilly Holdings, Inc., a Florida Profit Corporation, on behalf of the company. He is personally known to me ☐ or has produced _____ as identification.

_____
Signature of Notary

_____
Stamp of Notary Public

Exhibit "A"

Legal Description

LOTS 2 AND 3, BLOCK 354, THE SEMINOLE LAND & INVESTMENT CO'S (INCORPORATED) MAP OF TOWN OF ST. CLOUD, SECTION 1, TOWNSHIP 26 SOUTH, RANGE 30 EAST, ACCORDING TO THE PLAT THEREOF, RECORDED IN PLAT BOOK "B", PAGE(S) 33 AND 34, OF THE PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA.

Tax Parcel ID No.: 01-26-30-0001-0354-0020

EXHIBIT B

ZMA25-00013: CAVAN CORNER TABLE OF PERMISSIBLE USES	
USES	**BC: Business Commercial District (Restricted)**
Adult congregate living facility	C
Adult day care center	C
Alcoholic beverage establishments (see section 3.14.5)	
Aluminum products, sales and contractor	P
Amusement and commercial recreation, outdoors	
Amusement and commercial recreation, in an enclosed building	
Analytical chemist	
Answering service	
Antique shop	C
Appliances, sales and service	P
Apartments, condominiums, townhouses	
Artist and photographic studios	P
Auction houses	
Auditorium	P
Automobile:	
Body work and painting	
Frame repair	
Minor mechanical repair	C
Major mechanical repair	
Parts and supplies	P
Quick wash	
Sales and rental	
Service station	
Tire repair and replacement	
Towing and wrecker service	
Window tinting	P
Bakeries, most goods sold on premises at retail (not wholesale)	P
Banks and financial institutions	P
Barbershops and beauty shops	C
Bed and breakfast establishments	
Bicycle, sales and service	P
Bioanalytical labs	P
Boardinghouse	C
Boat, major repair	
Boat sales, minor service and rental	
Body piercing (licensed by state)	C
Bondsman	
Book, stationery, and newsstands	C
Building material, retail	P
Building material, wholesale	C
Building products manufacturing	
Cabinetry, metal, and woodworking shops	C
Catering only (no restaurant facilities)	P
Cemetery	
Child care centers—Day nurseries and kindergarten	C
City government offices & facilities	P

Civic club	P
Clairvoyant, fortuneteller	C
Clinics, medical and/or dental	P
Coffee roasting	P
Communication facilities, including tower (See section 3.14.29)	
Community center	C
Contractor (business office only)	P
Contractor's equipment, storage yards, provided open storage regulations are met	
Convenience stores with gasoline pumps	
Convenience stores without gasoline pumps	P
Dance and music studios	P
Data processing center	
Dental/medical laboratories	P
Dive shop	P
Drug store	P
Educational facility:	
College or university	C
Public or private school	C
Vocational school	C
Employment agencies	C
Equipment rental—Major	
Equipment rental—Minor	C
Equipment sales—Major	
Equipment sales—Minor	C
Exterminating service	C
Farm and garden supplies, including nursery stock, landscaping, garden center, sod, feed and grain	C
Filling stations (see Automobile service stations)	
Fire stations and police stations	P
Florist and gift shops	P
Food hall	P
Food stores or specialty food stores, including but not limited to retail sales of meat, fish, eggs, poultry, fruit, vegetables, candy, nuts, coffee, tea, confectionery, delicatessen, dairy products and health foods; stores carrying a variety of food or related goods or groceries	P
Frozen food locker	C
Funeral homes	P
Furniture sales	C
Furniture refinishing when in conjunction with retail sales	
Gun range, indoor	
Government offices	P
Gymnastic/health spa facilities	C
Hardware	P
Heliport	
Hobby and craft shops	P
Home health agency	P
Home occupations	
Hospitals and nursing homes	
Hotels, motels, motor hotels, motor lodges and tourist courts	
Interior decorating and window treatment	P
Janitorial service and supplies	C
Kennels (inside boarding only)	C
Kennels (with animal "runs" outside)	

Laundromats and dry cleaning establishments for general retail trade, on- premises or off premises cleaning; does not include distribution centers	C
Lawnmower, sales and service	C
Limousine rental service (see City Code)	
Locksmith	P
Lumber store	
Manufacturing, light	
Massage therapist (licensed)	C
Medical offices	P
Micro-beverage manufacturing	C
Mini warehouses and storage facilities, outside storage permitted (See sec. 3.14.23)	
Mobile food dispensing vehicles ("food trucks")	
Mobile home sales lots	
Multifamily residential	
Office, business and professional	P
Open-air market (see definition)	
Packaging, parcel and mail service	P
Pawnshop	
Pet stores and/or grooming	P
Pharmacy	C
Places of worship, with their attendant educational/recreational building, excluding schools	P
Pools/spas, retail and service	C
Pools/spas, retail only, no outside display or equipment storage	P
Post offices	P
Printing and duplicating, retail	P
Private clubs and lodges	C
Produce stand	C
Public:	
Arboretums, museums	C
Cultural institutions	C
Golf courses	
Gun range, municipal	
Libraries	C
Parks, parkways, playgrounds	C
Playfields, land resources	C
Seaplane base	
Utility buildings and facilities necessary to serve surrounding neighborhoods (not including storage or service yards)	
Utility structures	C
Radio and TV broadcasting studios and offices, excluding towers	C
Radio, TV and electronic sales and service	P
Repair shops, minor services (i.e., shoes, jewelry, electronics, small appliances	P
Residential recovery center, minor	
Residential uses including all customary accessory buildings in existence. See cha pter 3, article 14	C
Restaurants, delivery and/or carry-out, more than 1,500 square feet	C
Restaurants, delivery and/or carry-out, provided gross floor area does not exceed 1,500 square feet, unless such delivery and/or carry-out is accessory or ancillary to a full-service restaurant, then square footage restrictions of full- service restaurants apply	P
Restaurants, full-service (See chapter 3, article 14)	C
Retail assembly shops	C

Retail, general (i.e., department, hardware, paint, wallpaper, sporting goods, jewelry, computers, luggage, toy, wearing apparel stores)	P
Roominghouses	
Screen printing	C
Short-term rental (residential)	
Tailoring shops	P
Tattoo parlors (licensed by state)	
Taxi service (see City Code)	
Telephone business offices and exchanges	C
Theaters	
Thrift stores	
Timeshare/interval ownership	
Tobacco shops	
Transient lodging establishments	
Travel agents	P
Truck repair shop	
Upholstery	C
Vehicles for hire (i.e., U-Haul, Ryder, etc.)	
Veterinary clinic and animal hospitals	P
Video rental store	
Welding	

P = Permissible ***C = Conditional use***

THE SCHOOL DISTRICT OF OSCEOLA COUNTY, FLORIDA
PLANNING SERVICES DEPARTMENT
SCHOOL CAPACITY REPORT

SDOC#: 2025/26-0020

DRC#: ZMA25-00013

Current FLU: MDR
Requested FLU: COMM

PROJECT NAME: Cavan Corner

Current Zoning: R-2
Requested Zoning: BC

PROJECT LOCATION: 12th Street, St. Cloud, 34769

COMMENTS DUE DATE: 8.25.25

PID: 01-26-30-0001-0354-0020

This ZMA application for commercial retail development has no impact on public school capacity.

Meeting: November 13, 2025

Agenda Item Type: Public Hearings
Ordinance No. 2025-74 Nova Road Community Center ANX

Community Development Agenda Item:
FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-74, an ordinance of the City Council of the City of St. Cloud, Florida, to annex into the City of St. Cloud approximately +/- 6.20 acres identified as Nova Road Community Center, Project #ANX25-00018, generally located north of Lake Lizzie Drive, southeast of Nova Road, and west of Druliner Road; in accordance with the Voluntary Annexation Provisions of Chapter 171.044, Florida Statutes. (Above is full title) **ACTION ON ORDINANCE NO. 2025-74**

Strategic Key Focus Areas:
High-Performing Government

Background Information:
The subject property is located north of Lake Lizzie Drive, southeast of Nova Road and west of Druliner Road. The property consists of one parcel totaling approximately +/- 6.20 acres. This property currently has a Future Land Use Map designation of Community Center (County). The subject property is currently contiguous to the St. Cloud City Limits and is located within the Joint Planning Area (JPA) Boundary.

The applicant is requesting annexation into the City of St. Cloud. Concurrently, the applicant is requesting a Comprehensive Plan Amendment (CPA25-00008/Ordinance 2025-75) to amend the Future Land Use Map designation from Community Center (County) to Community Center (City), and a Zoning Map Amendment (ZMA25-00012/Ordinance 2025-76) from “CR” Commercial Restricted and “RS-3” Residential Single Family (County) to “CCC” Community Center Core (City).

Legal Authority:
Section 171.044, Voluntary Annexation, Florida Statutes.

Budget and Recommendation:
There is no cost associated with this item.

On October 21, 2025, the Planning Commission – Motion to recommend approval by Grigsby. Seconded by Bridgeforth. Passed 5-0.

Staff reviewed this request for a Voluntary Annexation on or before September 25, 2025, with no objections. Staff recommend **APPROVAL** of the request for Voluntary Annexation for Ordinance No. 2025-74.

Finance Director's Comments:

N/A

Procurement Director's Comments:
N/A

City Manager's Comments:
City Manager recommends approval

City Council Action:
11/13/25- Final Action
10/9/25 - Motion to approve the First Reading & Introduction by Urban. Seconded by Paul. Passed 4-0.

Attachments:
1. 1 ANX25-00018 NOVA RD COMMUNITY CENTER CC 11.13.25
2. 2 ANX25-00018 NOVA ROAD COMMUNITY CENTER ORDINANCE 2025-74 CC 11.13.25
3. 3 ANX25-00018 16 FINDINGS
4. 4 ANX25-00018 OC SCHOOLS COMMENTS

City Council Staff Report

Meeting Date: November 13, 2025

DRC Case No./Ord. No.
ANX25-00018/ 2025-74

Type of Application
Voluntary Annexation

Case Name
Nova Road Community Center

Applicant/Owner
Mk Real Estates Investments / Bobby Kisselback

Agent
RJWA, INC / John Adams

Address/Location
North of Lake Lizzie Drive, Southeast of Nova Road, and West of Druliner Road

Parcel ID #
04-26-31-0000-0190-0000

Total Land Area
+/- 6.20 acres

Project Planner
Ralph Keith
Associate Planner

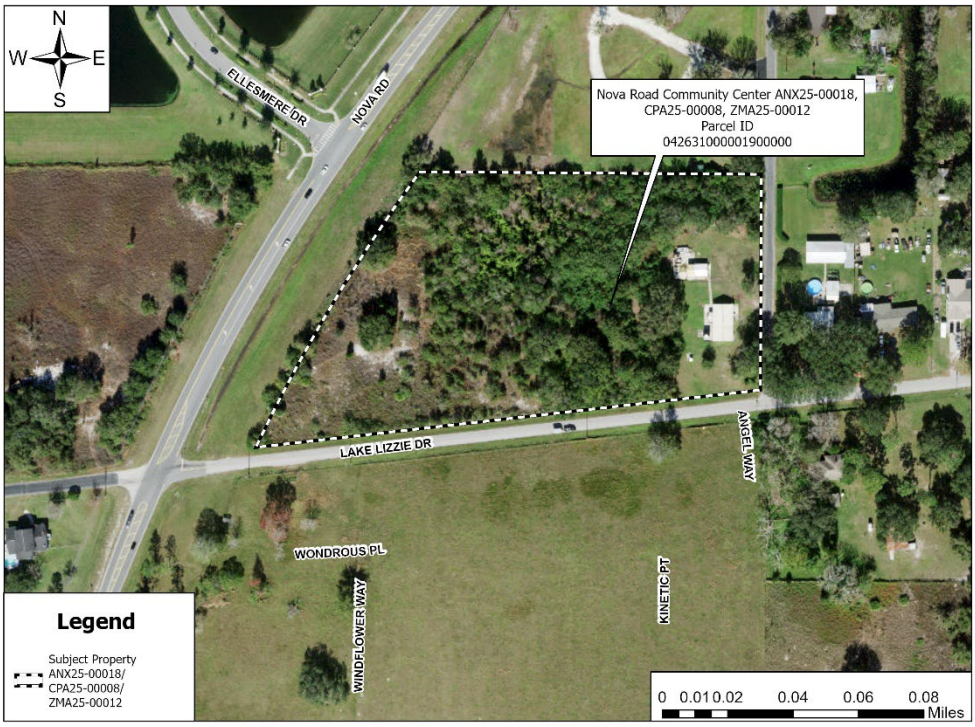


Figure 1 – Aerial Map

Request

The applicant is requesting consideration of an voluntary annexation of +/- 6.20 acres of land, known as Nova Road Community Center pursuant to F.S. 171.044. The subject property is shown in **Figure 1** above.

Background

The subject property is located north of Lake Lizzie Drive, southeast of Nova Road and west of Druliner Road. The property consists of one parcel totaling approximately +/- 6.20 acres. This property currently has a Future Land Use Map designation of Community Center (County). The subject property is currently contiguous to the St. Cloud City Limits and is located within the Joint Planning Area (JPA) Boundary.

The applicant is requesting annexation into the City of St. Cloud. Concurrently, the applicant is requesting a Comprehensive Plan Amendment (CPA25-00008/Ordinance 2025-75) to amend the Future Land Use Map designation from Community Center (County) to Community Center (City), and a Zoning Map Amendment (ZMA25-00012/Ordinance 2025-76) from "CR" Commercial

Restricted and "RS-3" Residential Single Family (County) to "CCC" Community Center Core (City).

The following table summarizes adjacent Future Land Use designations, Zoning districts and existing uses.

TABLE 1: ZONING & FUTURE LAND USE OF NEIGHBORING PROPERTIES			
Direction	***Zoning***	***Future Land Use***	***Existing Land Use***
North	**"A":** Agriculture (City)	Low Density Residential (County)	Mobile Home – Improved
East	**"RS-3"**: Residential (County)	Low Density Residential (County)	Single-Family – Improved
West	**"AC"**: Agriculture and Conservation (County) **"PUD"**: Planned Unit Development (City)	Low Density Residential (County) Low Density Residential (City)	Vacant Single-Family – Improved
South	**"CCP"**: Community Center Perimeter (County)	Community Center (County)	Multi-Family (Apartments)

Figures 2 and 3 below depict the current Future Land Use Map designations and Zoning districts within the City and Unincorporated Osceola County.

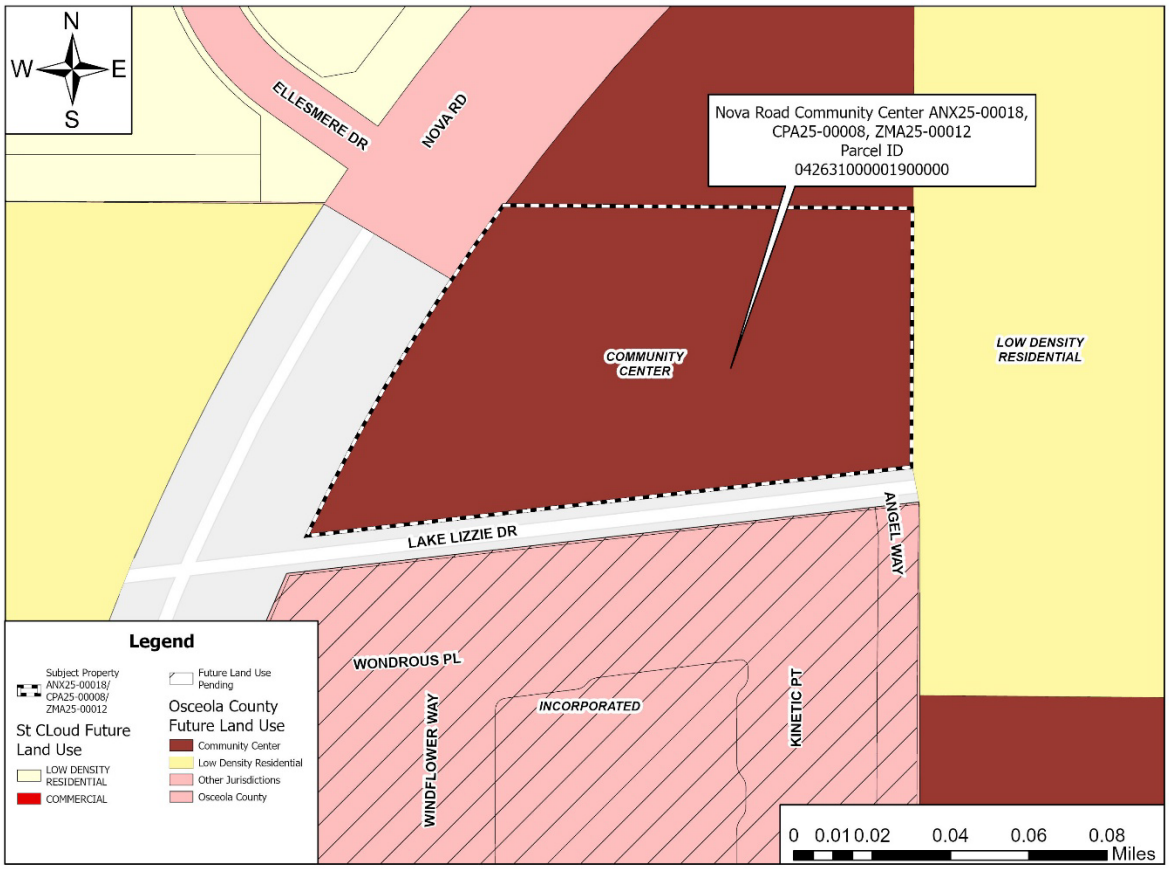


Figure 2 – Future Land Use Map

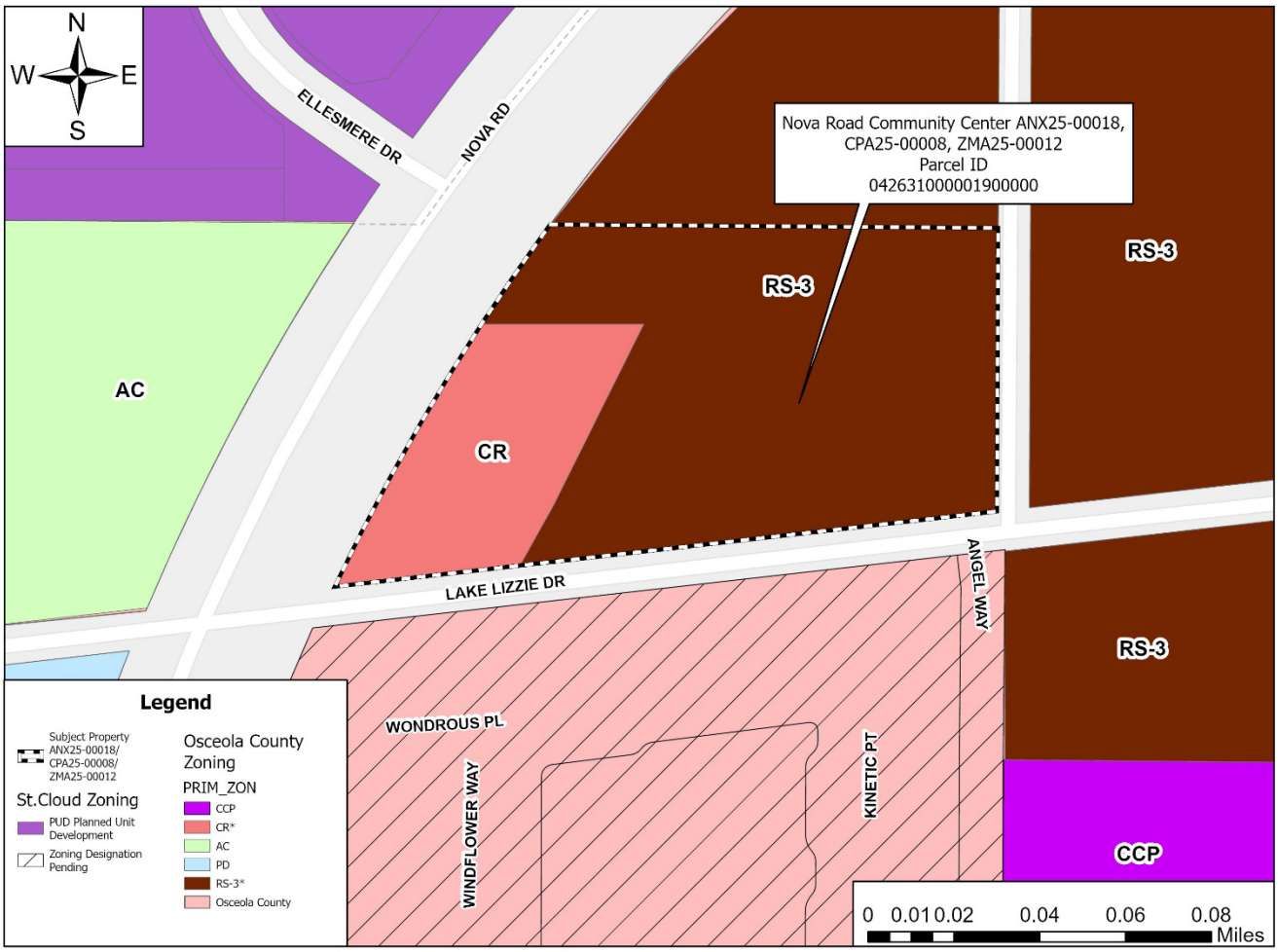


Figure 3 - Zoning Map

Public Notice

Notice of Public Hearing was mailed to property owners within 500 feet of the subject property and was advertised as required by State Statutes. No oral or written comments were received by staff from the public at the time of this report's distribution. Additional public comment may be available at the public hearing.

Findings

Prior to approval of the proposed voluntary annexation, Florida Statutes Section 171.044 requires the City to make the following findings:

A. *The subject property must be contiguous to the municipality and reasonably compact.*

The proposed annexation property is contiguous to City of St. Cloud city limits. It is reasonably compact, and the parcel is located within the Joint Planning Area Boundary, as provided in the executed "Joint Planning Area Interlocal Agreement between Osceola County and the City of St. Cloud", dated March 17, 2014. The proposed annexation meets the requirements of Florida Statutes Section 171.044 and therefore is eligible for annexation into the City.

B. *The petition must bear the signatures of all owners of the subject property to be annexed.*

This is a voluntary annexation, and the City of St. Cloud has documentation that the owner of the subject property has agreed to the voluntary annexation of parcel 04-26-31-0000-0190-0000 into the City's jurisdiction limits.

Review of 16 Required Findings of Section 1.3.3.C.2.a of the Land Development Code.

1. The proposed annexation will not have an adverse influence on living conditions in the neighborhood or create any isolated district. It would maintain a continuation of the existing pattern of development and is compatible with the residential development in the area.
2. The applicant has submitted a document, which includes responses to the 16 required findings which is in Attachment A.

Consistency With Strategic Plan Goals:

The proposed Annexation meets the intent of the following City of St. Cloud Strategic Goals:

- ***High-Performing Government****: To focus on the continuity and sustainability of core public services; to become an employer of choice; and to be on the cutting-edge of technology.*

Staff Recommendation

Staff reviewed this request for a Voluntary Annexation on or before September 25, 2025, with no objections. Staff recommend **APPROVAL** of the request for Voluntary Annexation for Ordinance No. 2025-74.

Planning Commission Recommendation

Per Section 1.3.3.B.2 of the Land Development Code, the Planning Commission shall review annexation, land use, and zoning petitions and submit its recommendations to the City Council based on the 16 required findings identified in Section 1.3.3.C.2.a of the Land Development Code.

On October 21, 2025, the Planning Commission – Motion to recommend approval by Grigsby. Seconded by Bridgeforth. Passed 5-0

City Council Requested Action

The City Council shall review the recommendation from the Planning Commission and render a decision based on the recommendation and information presented. The Planning Commission recommendation is based on the 16 required findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant responses to the 16 required findings have been provided as an attachment for the City Council's review.

On October 9, 2025 – Motion to approve the First Reading & Introduction by Urban. Seconded by Paul. Passed 4-0.

Attachments

- 16 Required Findings
- Ordinance No. 2025-74

RETURN TO:
CITY OF ST. CLOUD
DEPT OF COMMUNITY DEVELOPMENT
1300 9TH STREET
ST. CLOUD, FL 34769

ORDINANCE NO. 2025-74

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, TO ANNEX INTO THE CITY OF ST. CLOUD APPROXIMATELY +/- 6.20 ACRES IDENTIFIED AS NOVA ROAD COMMUNITY CENTER, PROJECT #ANX25-00018, GENERALLY LOCATED NORTH OF LAKE LIZZIE DRIVE, SOUTHEAST OF NOVA ROAD, AND WEST OF DRULINER ROAD; IN ACCORDANCE WITH THE VOLUNTARY ANNEXATION PROVISIONS OF CHAPTER 171.044, FLORIDA STATUTES.

WHEREAS, the owner of the property described below, being Bobby Kisselback, and represented by RJWA, Inc, petition on their behalf to the City Council of the City of St. Cloud, Florida pursuant to Chapter 171.044, Florida Statutes, requesting annexation into the City of St. Cloud, Florida in a petition signed and dated July 10, 2025; and

WHEREAS, the City Manager of the City of St. Cloud, Florida, has certified by review of the Certificate of Title dated July 23, 2025, that the owner of the property has signed and given RJWA, Inc, authority on July 8, 2025 to Petition for Annexation; and,

WHEREAS, the City Council has received the recommendation of the Planning Commission dated October 21, 2025; and,

WHEREAS, the property is reasonably compact and contiguous to the corporate areas of the City of St. Cloud, Florida and annexation will not result in the creation of any enclave; and,

WHEREAS, the City of St. Cloud, Florida, has provided or will provide municipal services to the property, and has found it in the best interest of the City to accept the petition for annexation.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of St. Cloud, Florida, as follows:

SECTION 1:

That the following property described below and shown on Exhibit "A" is annexed into the City of St. Cloud, Florida, pursuant to Chapter 171.044, Florida Statutes:

ALL THAT PORTION OF THE SOUTH HALF (S-1/2) OF THE SE 1/4 LYING NORTH OF OLD KISSIMMEE-MELBOURNE HIGHWAY, SECTION 4, TOWNSHIP 26 SOUTH, RANGE 31 EAST, LESS THE WEST 598 FEET THEREOF, AND LESS STATE ROAD RIGHT OF WAY, RECORDED IN O.R. BOOK 113, PAGE 120, OF THE PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA.

SUBJECT TO COVENANTS, RESTRICTIONS, AND EASEMENTS OF RECORD. SUBJECT ALSO TO APPLICABLE REAL PROPERTY TAXES FOR THE CURRENT AND SUBSEQUENT YEAR.

SUCH REAL PROPERTY OR ITS STREET ADDRESS IS COMMONLY KNOWN AS 5475 LAKE LIZZIE DRIVE, ST. CLOUD, FLORIDA 34771.

CONTAINING 269,944 SQUARE FEET OR 6.20 ACRES, MORE OR LESS.

CONTAINING 6.20 ACRES, MORE OR LESS.

Including the full width of any and all adjacent rights-of-way.

SECTION 2:

That occupants and owners of the properties shall be entitled and subject to all the rights, privileges, immunities, and responsibilities of occupants and owners of property in the City of St. Cloud, Florida, as provided in Chapter 171, Florida Statutes.

SECTION 3:

If any section or portion of a section of this ordinance proves to be invalid, unlawful or unconstitutional, it shall not be held to impair the validity, force or effect of any other section or part of this ordinance.

SECTION 4:

The City Clerk, after consultation with the City Attorney, is authorized to correct scrivener's errors found by filing a corrected copy of this ordinance in the official records of the City.

SECTION 5:

Effective Date. This ordinance has been published and shall take effect as provided by law.

First Reading on the 9th day of October, 2025

Second Reading on the 13th day of November, 2025

CITY OF ST. CLOUD

_____

Christian B. Robertson, Mayor

ATTEST:

_____

Ivy Llauro, City Clerk

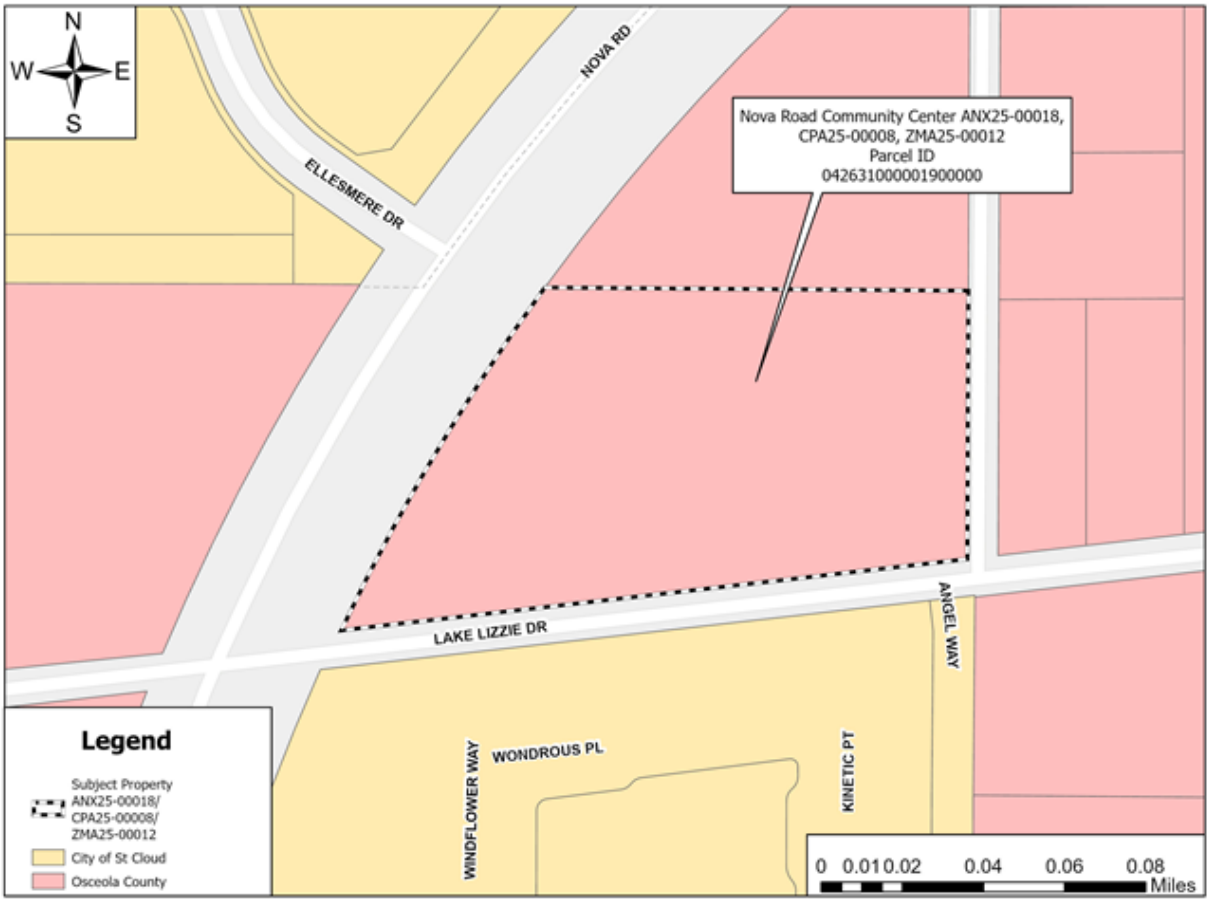
LEGAL IN FORM AND VALID IF ADOPTED:
de Beaubien, Simmons, Knight, Mantzaris & Neal, LLP

_____

Daniel F. Mantzaris, City Attorney

Pursuant to Section 695.26 (3) (f), this instrument exempt from Chapter 695, F.S.: Prepared by and return to a Public Official: City Manager, City of St. Cloud, 1300 9th Street, St. Cloud, Florida 34769.

EXHIBIT "A"



PARCEL ID NO.
04-26-31-0000-0190-0000

LAND DEVELOPMENT CODE 3.4.3.C.2.A
REQUIREMENTS OF THE PLANNING COMMISSION REPORT
TO THE CITY COUNCIL

The report and recommendation to the City Council shall show the Planning Commission has studied and considered, where applicable, whether or not:

1. The proposed change is contrary to the established land use pattern.
   The proposed change is not contrary to the established land use pattern. The subject site already holds the Community Center Future Land Use designation under Osceola County, and the request to maintain this designation within the City of St. Cloud—along with Community Center Core zoning—ensures continuity with surrounding urban development and planned growth along Nova Road.

2. The proposed change would create an isolated district unrelated to adjacent and nearby districts.
   The proposed change will not create an isolated district. It is part of a larger pattern of developing urban nodes within the Nova Road corridor, and the Community Center Core zoning will seamlessly integrate with adjacent and nearby properties as the area continues to urbanize under the City's long-term vision.

3. The proposed change would materially alter the population density pattern and thereby increase or overtax the load on public facilities such as schools, utilities, streets, etc.
   The proposed change is not expected to materially alter density patterns or overburden public infrastructure. The site already permits higher-density mixed-use development under its current Future Land Use, and future development will be evaluated for concurrency, with necessary improvements coordinated during site plan review.

4. Existing district boundaries are illogically drawn in relation to existing conditions on the property proposed for change.
   The existing zoning under Osceola County (CR & RS-3) does not match the Community Center Future Land Use designation or the City of St. Cloud's zoning framework. Applying Community Center Core zoning brings the property into logical alignment with existing conditions and implements the intended land use upon annexation.

5. The proposed change would be contrary to the land use plan and would have an adverse effect on the comprehensive plan.
   The proposed change is not contrary to the land use plan. It preserves the existing Community Center designation under the JPA and implements it through compatible City zoning. This supports the goals and policies of the City's Comprehensive Plan update and promotes coordinated urban development.

6. Changed or changing conditions make the passage of the proposed amendment necessary.
   The proposed amendment is necessary due to annexation into the City of St. Cloud under the JPA. This transition requires City zoning to be applied consistent with the existing Community Center Future Land Use designation and the City's updated planning framework.

7. The proposed change will adversely influence living conditions in the neighborhood.
   The proposed change will not negatively impact living conditions. Community Center Core zoning allows for a compatible mix of uses that enhance access to services and jobs, supporting a higher quality of life for surrounding residents in a walkable, planned environment.

8. The proposed change will create or excessively increase traffic congestion or otherwise affect public safety.
   The proposed zoning is not expected to cause excessive traffic congestion or harm public safety. Traffic impacts will be assessed during future development review, and the site's access to Nova Road provides a solid foundation for supporting future circulation needs.

9. The proposed change will create a drainage problem.
   The proposed zoning will not create a drainage issue. All development will be subject to permitting and stormwater review by the City of St. Cloud and the South Florida Water Management District, ensuring drainage compliance and protection of adjacent properties.

10. The proposed change will seriously reduce light or air to adjacent areas.
    The proposed zoning does not allow excessive building height or massing. Development within the Community Center Core district is limited to three stories for non-residential structures, preserving access to light and air for neighboring areas while maintaining appropriate scale.

11. The proposed change will adversely affect property values in the adjacent area.
    The proposed change is anticipated to have a positive influence on surrounding property values by implementing a zoning district that encourages high-quality development, improved infrastructure, and enhanced local services.

12. The proposed change will be a deterrent to the improvement or development of adjacent property in accordance with existing regulations.
    The proposed zoning will support—not hinder—future development of nearby properties. By aligning land use and zoning with the City's updated plan, this request creates an orderly, compatible environment that fosters investment in the area.

13. The proposed change will constitute a grant of special privilege to an individual owner as contrasted with the public welfare.
    This request does not constitute a special privilege. It is a necessary procedural action to apply the appropriate zoning to a site already designated for Community Center uses under the JPA. It furthers public welfare by supporting coordinated planning and managed growth.

14. There are substantial reasons why a reasonable use of property cannot be accomplished under existing zoning.
    The existing Osceola County zoning (CR & RS-3) does not fully implement the Community Center Future Land Use designation. To accommodate the intended mixed-use intensity and density, City zoning must be applied, making the Community Center Core designation the appropriate and necessary zoning district.

15. Whether the change suggested is out of scale with the needs of the neighborhood or the city.
    The proposed zoning is not out of scale. The Community Center Core zoning is specifically designed to implement a transitional level of development intensity outside of Center Cores, and its requirements are compatible with the evolving urban fabric of this area.

16. It is impossible to find other adequate sites in the city for the proposed use in districts already zoned for such use.
    While other sites may hold similar designations, this property already carries the Community Center Future Land Use designation and meets locational and access criteria for Community Center development. The zoning request is an implementation step, not a land use shift, and is appropriate for this specific site.

THE SCHOOL DISTRICT OF OSCEOLA COUNTY, FLORIDA
PLANNING SERVICES DEPARTMENT
SCHOOL CAPACITY REPORT

SDOC#: 2025/26-0026 DRC#: ANX25-00018

Current FLU: CC (County)
Requested FLU: CC (City)

PROJECT NAME: Nova Road Community Center

Current Zoning: RS-3
Requested Zoning: CCP

PROJECT LOCATION: 5475 Lake Lizzie Dr., St. Cloud, 34771

COMMENTS DUE DATE: 9.11.25

PID: 04-26-31-0000-0190-0000

The School District of Osceola County reserves its right to ensure proper mitigation of any impact on school capacity and the collection of Educational System Impact Fees.

Meeting: November 13, 2025

Agenda Item Type: Public Hearings
Ordinance No. 2025-75 Nova Road Community Center FLU

Community Development Agenda Item:
FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-75, an ordinance of the City Council of the City of St. Cloud, Florida, assigning a Future Land Use Designation of approximately +/- 6.20 acres identified as Nova Road Community Center, Project #CPA25-00008, generally located north of Lake Lizzie Drive, southeast of Nova Road, and west of Druliner Road; from "CCC" Community Center (County) to "CCC" Community Center (City), providing for amending the official Future Land Use Map of the Comprehensive Plan, filing of the Planning Commission recommendation and proof of publication, applicability and effect, severability, copies on file and effective date. (Above is full title) **ACTION ON ORDINANCE NO. 2025-75**

Strategic Key Focus Areas:
High-Performing Government

Background Information:
The subject property is located north of Lake Lizzie Drive, southeast of Nova Road and west of Druliner Road. The property consists of one parcel totaling approximately +/- 6.20 acres. This property currently has a Future Land Use Map designation of Community Center (County). The subject property is currently contiguous to the St. Cloud City Limits and is located within the Joint Planning Area (JPA) Boundary.

Concurrently, the applicant is requesting an annexation into the City of St. Cloud City limits (ANX25-00018/Ordinance No. 2025-75) and a Zoning Map Amendment (ZMA25-00012/Ordinance No. 2025-76) from "CR" Commercial Restricted and "RS-3" Residential Single Family (County) to "CCC" Community Center Core (City).

Legal Authority:
Per section 1.3.7 of the Land Development Code, The City Council shall review the recommendation from the Planning Commission and render a decision based on the recommendation and information presented. The Planning Commission recommendation is based on the 16 required findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant responses to the 16 required findings have been provided as an attachment for the City Council's review.

Budget and Recommendation:
There is no cost associated with this item.

On October 21, 2025, the Planning Commission – Motion to recommend approval by Grigsby. Seconded by Douglas. Passed 5-0.

Staff reviewed this request for a Comprehensive Plan Amendment on or before September 29, 2025, with no objections. Therefore, staff recommends **APPROVAL** of the request for Comprehensive Plan Amendment for Ordinance No. 2025-75.

Finance Director's Comments:
N/A

Procurement Director's Comments:
N/A

City Manager's Comments:
City Manager recommends approval

City Council Action:
11/13/25- Final Action
10/09/25 - Motion to approve the First Reading & Introduction by Gilbert. Seconded by Paul. Passed 4-0.

Attachments:
1. 1 CPA25-00008 Nova Road Community Center CC 11.13.25
2. 2 CPA25-00008 Nova Road Community Center Ordinance 2025-75 11.13.25
3. CPA25-00008 OC SCHOOLS COMMENTS

City Council Staff Report

Meeting Date: November 13, 2025

DRC Case No. /Ord. No.
CPA25-00008/2025-75

Type of Application
Comprehensive Plan Amendment (Small-Scale)

Case Name
Nova Road Community Center

Applicant/Owner
Mk Real Estates Investments / Bobby Kisselback

Agent
RJWA, INC / John Adams

Address/Location
North of Lake Lizzie Drive, Southeast of Nova Road and West of Druliner Road

Parcel ID #
04-26-31-0000-0190-0000

Total Land Area
+/- 6.20 acres

Project Planner
Ralph Keith
Associate Planner



Figure 1 – Aerial Map

Request

The applicant is requesting consideration of a Comprehensive Plan Amendment from Community Center (County) to Community Center (City) for approximately +/- 6.20 acres of land, as shown in **Figure 1** above.

Background

The subject property is located north of Lake Lizzie Drive, southeast of Nova Road and west of Druliner Road. The property consists of one parcel totaling approximately +/- 6.20 acres. This property currently has a Future Land Use Map designation of Community Center (County). The subject property is currently contiguous to the St. Cloud City Limits and is located within the Joint Planning Area (JPA) Boundary.

Concurrently, the applicant is requesting an annexation into the City of St. Cloud City limits (ANX25-00018/Ordinance No. 2025-75) and a Zoning Map Amendment (ZMA25-00012/Ordinance No. 2025-76) from "CR" Commercial Restricted and "RS-3" Residential Single Family (County) to "CCC" Community Center Core (City).

The following table summarizes adjacent Future Land Use designations, Zoning districts and existing uses.

TABLE 1: ZONING & FUTURE LAND USE OF NEIGHBORING PROPERTIES			
Direction	***Zoning***	***Future Land Use***	***Existing Land Use***
North	**"A":** Agriculture (City)	Low Density Residential (County)	Mobile Home – Improved
East	**"RS-3"**: Residential (County)	Low Density Residential (County)	Single-Family – Improved
West	**"AC"**: Agriculture and Conservation (County)	Low Density Residential (County)	Vacant Single-Family – Improved
South	**"CCP"**: Community Center Perimeter (County)	Community Center (County)	Multi-Family (Apartments)

Figures 2 & 3 below depict the current Future Land Use and Zoning districts within the city.

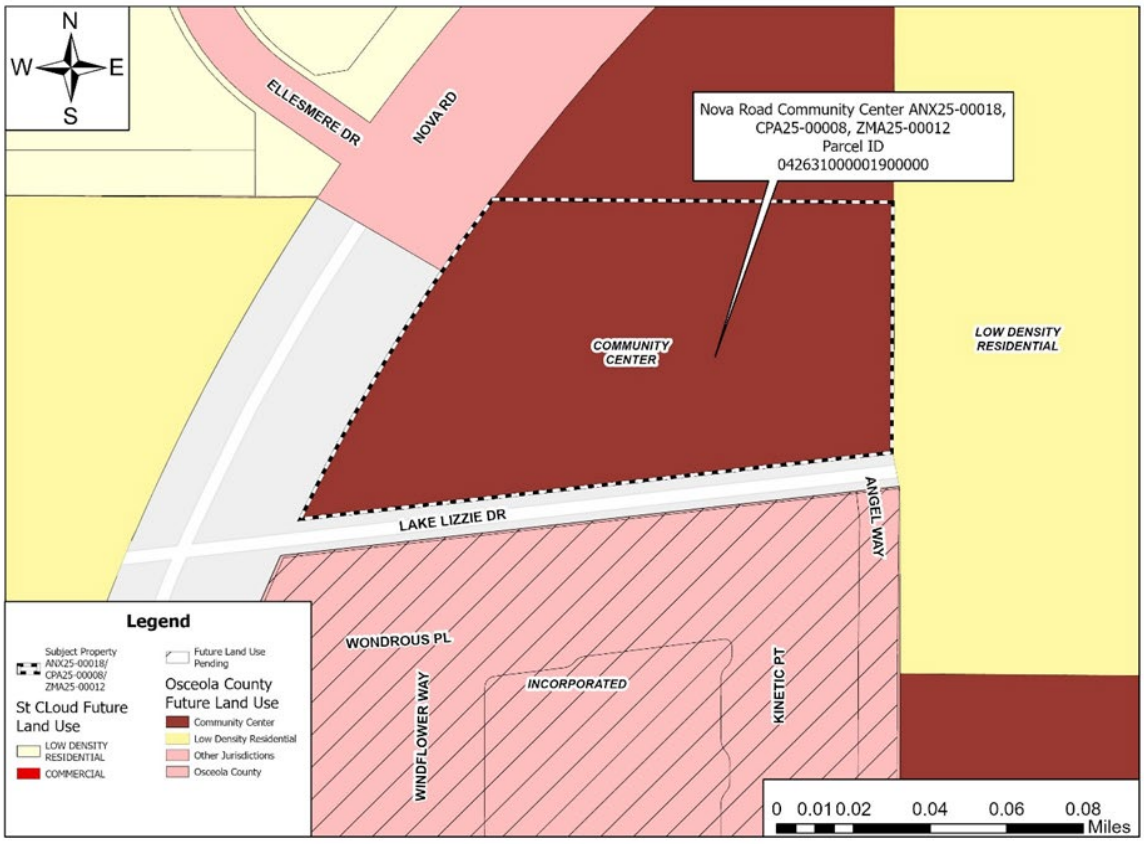


Figure 2 – Future Land Use Map

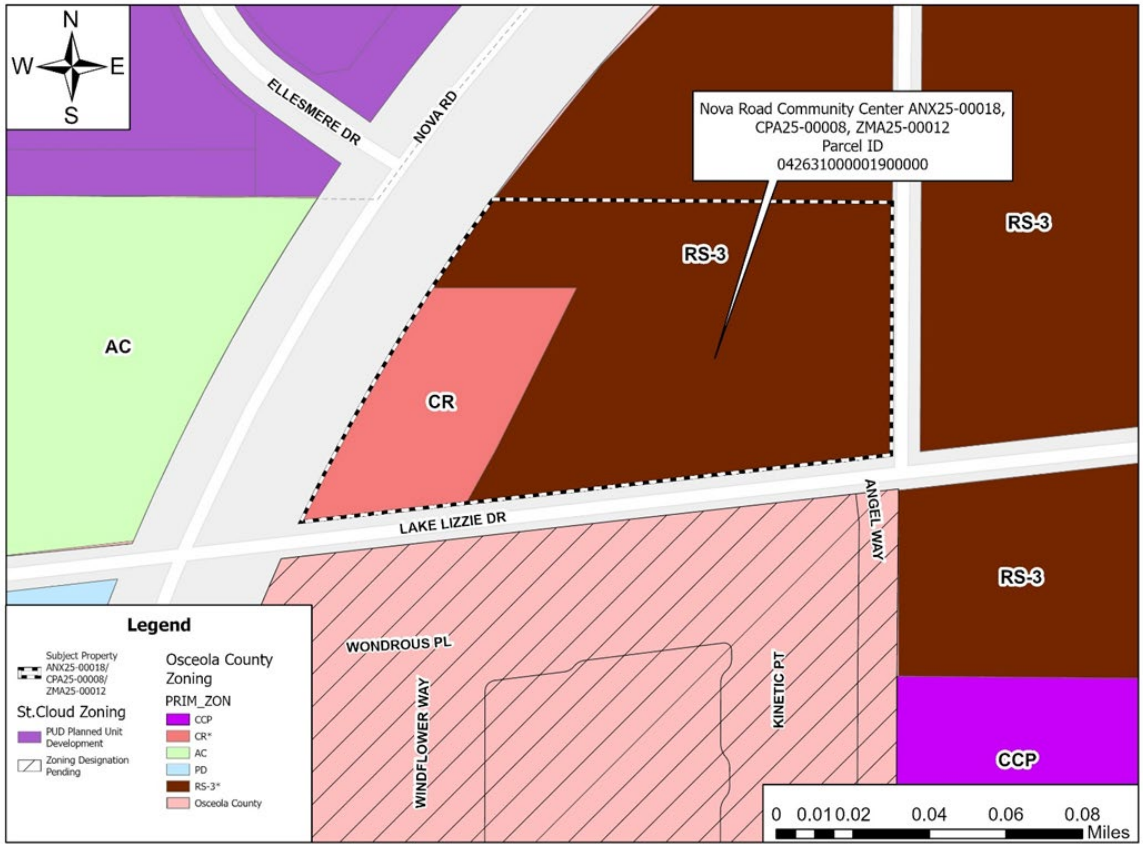


Figure 3 – Zoning Map

Public Notice

Notice of Public Hearing was mailed to property owners within 500 feet of the subject property and was advertised as required by State Statutes. No oral or written comments were received by staff from the public at the time of this report's distribution. Additional public comment may be available at the public hearing.

Findings

Staff has reviewed the applicant's response to the 16 Required Findings of Section 1.3.3.C.2.A of the Land Development Code. The applicant's responses follow the **bolded** LDC language, and staff's comments follow in *italics*:

1. **The proposed change is contrary to the established land use pattern;**

   "The proposed change is not contrary to the established land use pattern. The subject site already holds the Community Center Future Land Use designation under Osceola County, and the request to maintain this designation within the City of St. Cloud—along with Community Center Core zoning—ensures continuity with surrounding urban development and planned growth along Nova Road."

   The project is requesting a Future Land Use change from Community Center (County) to Community Center (City). The proposed change is consistent with the surrounding land

use pattern and development. Currently, the parcel abuts Community Center future land use designations to the south.

2. **The proposed change would create an isolated district unrelated to the adjacent and nearby districts;**

   "The proposed change will not create an isolated district. It is part of a larger pattern of developing urban nodes within the Nova Road corridor, and the Community Center Core zoning will seamlessly integrate with adjacent and nearby properties as the area continues to urbanize under the City's long-term vision."

   The proposed change would not create an isolated district. Assigning a future land use designation of Community Center is consistent with adjacent district and existing Future Land Use in the area. This request will be an expansion of the Community Center future land use districts to the south.

3. **The proposed change would materially alter the population density pattern and thereby increase or overtax the load on public facilities such as schools, utilities, streets, etc.;**

   "The proposed change is not expected to materially alter density patterns or overburden public infrastructure. The site already permits higher-density mixed-use development under its current Future Land Use, and future development will be evaluated for concurrency, with necessary improvements coordinated during site plan review."

   The proposed change should not materially alter the population density pattern or overtax the load on public facilities. The Community Center designation currently exists in Osceola County, therefore this request is not a significant change. Additionally, the school capacity report states that this Comprehensive Plan Amendment application has no impact on public school capacity.

4. **Existing district boundaries are illogically drawn in relation to existing conditions on the property proposed for change;**

   "The existing zoning under Osceola County (CR & RS-3) does not match the Community Center Future Land Use designation or the City of St. Cloud's zoning framework. Applying Community Center Core zoning brings the property into logical alignment with existing conditions and implements the intended land use upon annexation."

   District boundaries are not illogically drawn but are evolving pursuant to the needs of the City and the Comprehensive Plan, thus allowing for the consideration of this Comprehensive Plan amendment to encourage compact development. Figure 2 depicts the Future Land Use designations surrounding the subject properties.

5. **The proposed change would be contrary to the land use plan and would have an adverse effect on the comprehensive plan;**

   "The proposed change is not contrary to the land use plan. It preserves the existing Community Center designation under the JPA and implements it through compatible City zoning. This supports the goals and policies of the City's Comprehensive Plan update and promotes coordinated urban development."

The proposed Comprehensive Plan Amendment is consistent with the future land use designations of Community Center for the surrounding parcels and will not adversely impact the goals and objectives of the City's Comprehensive Plan.

6. **Change or changing conditions make the passage of the proposed amendment necessary;**

"The proposed amendment is necessary due to annexation into the City of St. Cloud under the JPA. This transition requires City zoning to be applied consistent with the existing Community Center Future Land Use designation and the City's updated planning framework."

In accordance with the Joint Planning Agreement, the subject property shares contiguous boundaries with the City limits to the west and south, thereby qualifying it for voluntary annexation and addition to the City's Future Land Use Map.

The approved Community Center future land use designation to the south has changed the development and characteristics of the area, creating a hub of Community Center districts ranging in intensity of use. The development and characteristics of the area are evolving pursuant to the needs of the City and the Comprehensive Plan, thus allowing for the consideration of this Comprehensive Plan Amendment.

7. **The proposed change will adversely influence living conditions in the neighborhood;**

"The proposed change will not negatively impact living conditions. Community Center Core zoning allows for a compatible mix of uses that enhance access to services and jobs, supporting a higher quality of life for surrounding residents in a walkable, planned environment."

The proposed Comprehensive Plan Amendment should not adversely impact living conditions in the neighborhood. It will allow consistency in the area's development pattern.

8. **The proposed change will create or excessively increase traffic congestion or otherwise affect public safety;**

"The proposed zoning is not expected to cause excessive traffic congestion or harm public safety. Traffic impacts will be assessed during future development review, and the site's access to Nova Road provides a solid foundation for supporting future circulation needs."

The proposed Comprehensive Plan Amendment is consistent with traffic patterns and would not excessively increase traffic congestion or negatively affect public safety. The adjacent parcel to the south is currently developing with existing entitlements through Oceola County, and no new development is currently being proposed on this parcel. Any new development would be required to go through the City's application processes for further review, and a Traffic Impact Analysis may be required at that time.

9. **The proposed change will create a drainage problem;**

"The proposed zoning will not create a drainage issue. All development will be subject to permitting and stormwater review by the City of St. Cloud and the South Florida Water Management District, ensuring drainage compliance and protection of adjacent properties."

Pursuant to Chapter 6 of the Land Development Code, stormwater management systems shall be provided for all areas of development and accommodate the runoff that flows into or across the development area without additional flooding of any other lands.

10. **The proposed change will seriously reduce light or air to adjacent areas;**

    "The proposed zoning does not allow excessive building height or massing. Development within the Community Center Core district is limited to three stories for non-residential structures, preserving access to light and air for neighboring areas while maintaining appropriate scale."

    The proposed Comprehensive Plan Amendment does not have any impact on light reduction or air to the adjacent areas as no development is being proposed for this application. At the time of any site development, standards set forth within the Land Development Code for exterior lighting would need to be followed.

11. **There is no development being proposed currently. If new development is proposed, a Site Development Plan submittal would address any possible impacts to light or air and determine the method of mitigation. The proposed change will adversely affect property values in the adjacent area;**

    "The proposed change is anticipated to have a positive influence on surrounding property values by implementing a zoning district that encourages high-quality development, improved infrastructure, and enhanced local services."

    The proposed Comprehensive Plan Amendment is not expected to adversely affect property values in the area.

12. **The proposed change will be a deterrent to the improvement or development of adjacent property in accordance with existing regulations;**

    "The proposed zoning will support—not hinder—future development of nearby properties. By aligning land use and zoning with the City's updated plan, this request creates an orderly, compatible environment that fosters investment in the area."

    The proposed Comprehensive Plan Amendment is consistent with the development of adjacent Community Center designated properties to the south. At the time of site development, future connections would be required to ensure connectivity for any future developments of adjacent parcels, which should support improvement rather than be a deterrent.

13. **The proposed change will constitute a grant of special privilege to an individual owner as contrasted with the public welfare;**

    "This request does not constitute a special privilege. It is a necessary procedural action to apply the appropriate zoning to a site already designated for Community Center uses under the JPA. It furthers public welfare by supporting coordinated planning and managed growth."

    The proposed Comprehensive Plan Amendment does not grant special privilege to an individual owner, developer, or contrast with public welfare.

14. **There are substantial reasons why a reasonable use of property cannot be accomplished under existing zoning.**

"The existing Osceola County zoning (CR & RS-3) does not fully implement the Community Center Future Land Use designation. To accommodate the intended mixed-use intensity and density, City zoning must be applied, making the Community Center Core designation the appropriate and necessary zoning district."

The parcel will be annexed into the City limits concurrently via Ordinance No. 2025-74. The proposed Comprehensive Plan Amendment will establish the necessary Future Land Use designation for the property consistent with adjacent districts and existing future land use in the area.

15. **Whether the change suggested is out of scale with the needs of the neighborhood or the city;**

"The proposed zoning is not out of scale. The Community Center Core zoning is specifically designed to implement a transitional level of development intensity outside of Center Cores, and its requirements are compatible with the evolving urban fabric of this area."

This amendment is compatible with the scale and character of the surrounding area and the City as a whole. It creates continuity with the existing Community Center Future Land Use designation to the south and is necessary to allow the expansion of the established development pattern.

16. **It is impossible to find other adequate sites in the city for the proposed use in districts already zoned for such use.**

"While other sites may hold similar designations, this property already carries the Community Center Future Land Use designation and meets locational and access criteria for Community Center development. The zoning request is an implementation step, not a land use shift, and is appropriate for this specific site."

There are other areas in the City where the proposed Future Land Use designation already exists; however, this property is adjacent to a parcel with the same designation. Upon annexation, the proposed Comprehensive Plan Amendment will be consistent with the adjacent land use designation in the surrounding area.

School Capacity Report

The Osceola County School District's School Capacity report indicates this application has no impact on public school capacity.

Consistency With Strategic Plan Goals:

The proposed Comprehensive Plan Amendment meets the intent of the following City of St. Cloud Strategic Goals:

- ***High-Performing Government:*** *To focus on the continuity and sustainability of core public services; to become an employer of choice; and to be on the cutting-edge of technology.*

Staff Recommendation

Staff reviewed this request for a Comprehensive Plan Amendment on or before September 29, 2025, with no objections. Therefore, staff recommends **APPROVAL** of the request for Comprehensive Plan Amendment for Ordinance No. 2025-75.

Planning Commission Recommendation

Per section 1.3.7 of the Land Development Code, The City Council shall review the recommendation from the Planning Commission and render a decision based on the recommendation and information presented. The Planning Commission recommendation is based on the 16 required findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant responses to the 16 required findings have been provided as an attachment for the City Council's review.

On October 21, 2025, the Planning Commission – Motion to recommend approval by Grisby. Seconded by Douglas. Passed 5-0

City Council Requested Action

The City Council shall review the recommendation from the Planning Commission and render a decision based on the recommendation and information presented. The Planning Commission recommendation is based on the 16 required findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant responses to the 16 required findings have been provided as an attachment for the City Council's review.

On October 9, 2025 – Motion to approve the First Reading & Introduction by Gilber. Seconded by Paul. Passed 4-0.

Attachments

- Ordinance No. 2025-75
- School Capacity Report

RETURN TO:
CITY OF ST. CLOUD
DEPT OF COMMUNITY DEVELOPMENT
1300 9TH STREET
ST. CLOUD, FL 34769

ORDINANCE NO. 2025-75

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, ASSIGNING A FUTURE LAND USE DESIGNATION OF APPROXIMATELY +/- 6.20 ACRES IDENTIFIED AS NOVA ROAD COMMUNITY CENTER, PROJECT #CPA25-00008, GENERALLY LOCATED NORTH OF LAKE LIZZIE DRIVE, SOUTHEAST OF NOVA ROAD, AND WEST OF DRULINER ROAD; FROM "CCC" COMMUNITY CENTER (COUNTY) TO "CCC" COMMUNITY CENTER (CITY), PROVIDING FOR AMENDING THE OFFICIAL FUTURE LAND USE MAP OF THE COMPREHENSIVE PLAN, FILING OF THE PLANNING COMMISSION RECOMMENDATION AND PROOF OF PUBLICATION, APPLICABILITY AND EFFECT, SEVERABILITY, COPIES ON FILE AND EFFECTIVE DATE.

WHEREAS, Chapter 163.3167, Florida Statues, and Article VII, of the Charter Laws of the City of St. Cloud, allows the Council of the City of St. Cloud to prepare and enforce a Comprehensive Plan, and under such authority only lawful procedures and requirements have been met; and,

WHEREAS, the City adopted the Comprehensive Plan pursuant to Chapter 163, Florida Statutes, by Ordinance 2002-41, on September 26, 2002; and,

WHEREAS, pursuant to Chapter 163.3162, Florida Statutes, the City Council of the City of St. Cloud has determined it necessary and desirable to adopt the amended version of the City of St. Cloud, Florida, Comprehensive Plan; and,

WHEREAS, this Ordinance is enacted under the authority of Chapter 163.3161 through 163.3215, Florida Statutes, and Chapter 166, Florida Statutes, as amended, reserving to the City Council of the City of St. Cloud all permitted discretionary authority; and,

WHEREAS, the City Council received the recommendation of Planning Commission dated October 21st, 2025 and,

WHEREAS, the City Council has held two (2) public hearings and has produced advertisement and notice on this matter consistent with the requirements of Chapter 163.3187, Florida Statutes, and,

WHEREAS, the City staff has prepared a staff report and will rely on the data as findings of fact to support the map change.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, as follows: SECTION 1:

All information above is true and correct.

SECTION 2:

The City of St. Cloud, Florida, Comprehensive Plan is amended in the following respects to the properties, identified under Comprehensive Plan Amendment 25-00008, as shown on Exhibit "A", and described as follows:

Legal Description:
ALL THAT PORTION OF THE SOUTH HALF (S-1/2) OF THE SE 1/4 LYING NORTH OF OLD KISSIMMEE-MELBOURNE HIGHWAY, SECTION 4, TOWNSHIP 26 SOUTH, RANGE 31 EAST, LESS THE WEST 598 FEET THEREOF, AND LESS STATE ROAD RIGHT OF WAY, RECORDED IN O.R. BOOK 113, PAGE 120, OF THE PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA.

SUBJECT TO COVENANTS, RESTRICTIONS, AND EASEMENTS OF RECORD. SUBJECT ALSO TO APPLICABLE REAL PROPERTY TAXES FOR THE CURRENT AND SUBSEQUENT YEAR.

SUCH REAL PROPERTY OR ITS STREET ADDRESS IS COMMONLY KNOWN AS 5475 LAKE LIZZIE DRIVE, ST. CLOUD, FLORIDA 34771.

CONTAINING 269,944 SQUARE FEET OR 6.20 ACRES, MORE OR LESS.

CONTAINING 6.20 ACRES, MORE OR LESS.

Including the full width of any and all adjacent rights-of-way.

A. The City of St. Cloud Future Land Use Map, 2025, is amended to show the property as "Community Center",
B. Any and all additional maps of the Comprehensive Plan are amended to show the property;
C. All Goals, Objectives, Policies, and other planning provisions applicable to properties as shown and set forth in the City of St. Cloud, Florida, Comprehensive Plan apply to the property.

SECTION 3:

The City Manager or his/her designee is authorized and directed to promptly enter changes on the Official Future Land Use Map.

SECTION 4:

Upon adoption of this ordinance, the Planning Commission recommendation and "Proof of Publication" of the required Public Hearing notices shall be filed in the Department of Community Development.

SECTION 5:

The applicability and effect of the City of St. Cloud, Florida, Comprehensive Plan shall be as provided by Chapter 163.3161 through 163.3217, Florida Statutes, and this Ordinance, reserving to the City Council of the City of St. Cloud all permitted discretionary authority.

SECTION 6:

The City Clerk, after consultation with the City Attorney, is authorized to correct scrivener's errors found by filing a corrected copy of this ordinance in the official records of the City.

SECTION 7:

If any section or portion of a section of this ordinance proves to be invalid, unlawful, or unconstitutional, it shall not be held to impair the validity, force, or effect of any other section or part of this ordinance.

SECTION 8:

A. A certified copy of the enacting ordinance and any amendments shall be filed with the Clerk of the Circuit Court.

B. A certified copy of the enacting ordinance, as well as certified copies of the City of St. Cloud, Florida, Comprehensive Plan and any amendments, shall be on file and made available to the public in the office of the City Clerk of the City of St. Cloud, Florida.

C. To make the City of St. Cloud, Florida, Comprehensive Plan available to the public, a certified copy of the enacting ordinance, as well as certified copies of the City of St. Cloud, Florida, Comprehensive Plan and any amendments, shall be located in the Department of Community Development of the City of St. Cloud. The Department of Community Development shall also make copies available to the public for a reasonable publication charge.

SECTION 9:

Effective Date. This ordinance shall become effective upon the effective date of Ordinance No. 2024-50 (CPA24-00007) as provided by law.

First Reading on the 9th day of October, 2025.

Final Reading on the 13th day of November, 2025.

CITY OF ST. CLOUD

_____
Christian B. Robertson, Mayor

ATTEST:

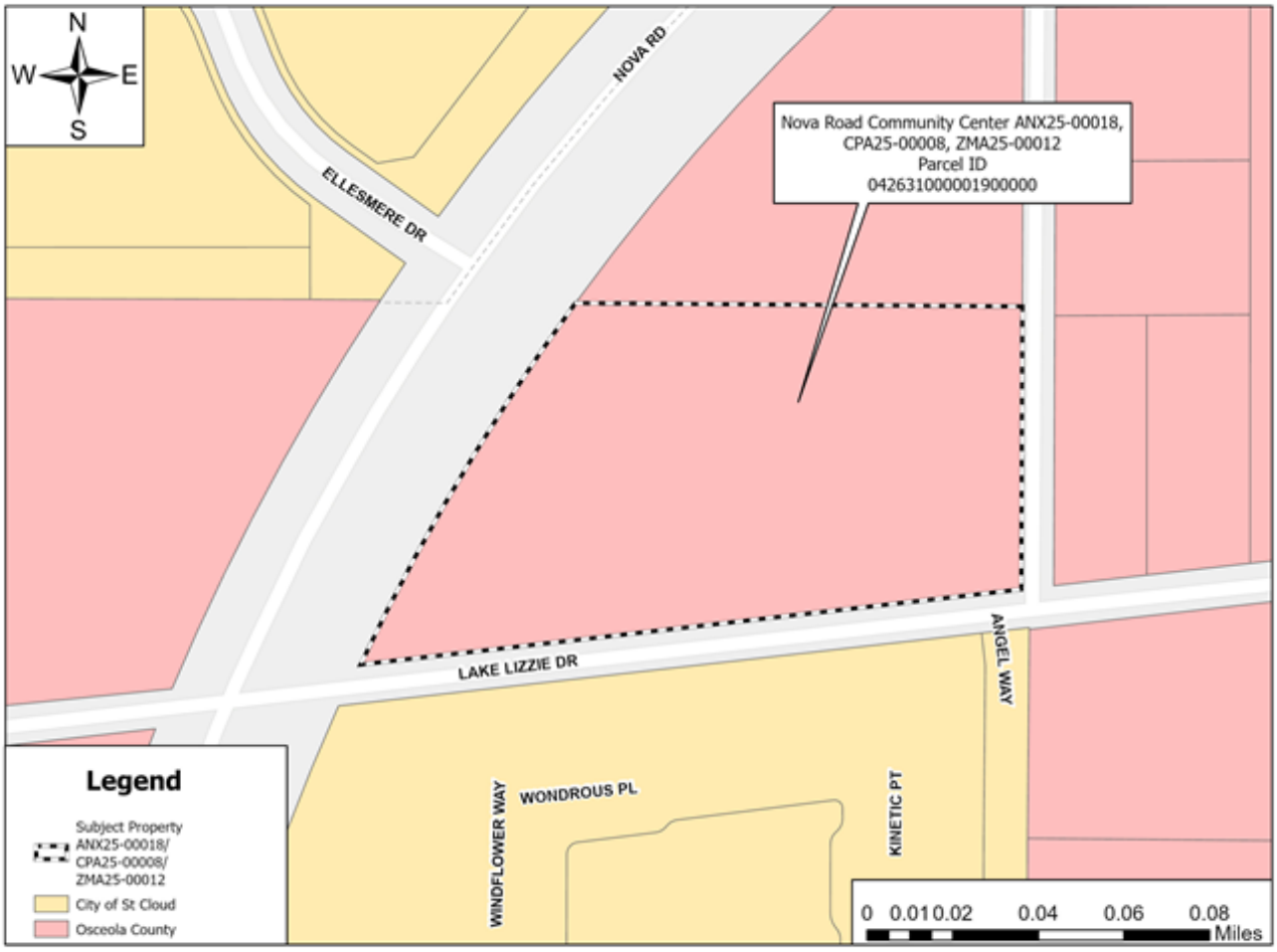
_____
Ivy Llauro, City Clerk

LEGAL IN FORM AND VALID IF ADOPTED:
de Beaubien, Simmons, Knight, Mantzaris & Neal, LLP

_____
Daniel F. Mantzaris, City Attorney

Pursuant to Section 695.26 (3) (f), this instrument exempt from Chapter 695, F.S.: Prepared by and return to a Public Official: City Manager, City of St. Cloud, 1300 9th Street, St. Cloud, Florida 34769.

EXHIBIT "A"



PARCEL ID NO.
04-26-31-0000-0190-0000

THE SCHOOL DISTRICT OF OSCEOLA COUNTY, FLORIDA
PLANNING SERVICES DEPARTMENT
SCHOOL CAPACITY REPORT

SDOC#: 2025/26-0026 DRC#: CPA25-00008

Current FLU: CC (County)
Requested FLU: CC (City)

PROJECT NAME: Nova Road Community Center

Current Zoning: RS-3
Requested Zoning: CCP

PROJECT LOCATION: 5475 Lk. Lizzie Dr., St. Cloud, 34771

COMMENTS DUE DATE: 9.11.25

PID: 04-26-31-0000-0190-0000

A more accurate report can be generated with the submittal of a detailed Site and Development Plan application which indicates the actual number of dwelling units proposed. The School District of Osceola County reserves its right to ensure proper mitigation of any impact on school capacity and the collection of Educational System Impact Fees.

Meeting: November 13, 2025

Agenda Item Type: Public Hearings
Ordinance No. 2025-76 Nova Road Community Center ZMA

Community Development Agenda Item:
FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-76, an ordinance of the City Council of the City of St. Cloud, Florida, providing for the Zoning Amendment of the Zoning Map of the Land Development Code of the City of St. Cloud, Florida, specifically changing the zoning designation of approximately +/- 6.20 acres identified as Nova Road Community Center, Project #ZMA25-00012, from "CR" Commercial Restricted (County) and “RS-3” Residential Single Family (County) to "CCC" Community Center Core (City) generally located north of Lake Lizzie Drive, southeast of Nova Road, and west of Druliner Road, providing for entering the designation on the official Zoning Map, filing of the Planning Commission recommendation and proof of publication, severability, and effective date. (Above is full title) **ACTION ON ORDINANCE NO. 2025-76** (This is a Quasi-Judicial proceeding)

Strategic Key Focus Areas:
High-Performing Government

Background Information:
The subject property is generally located north of Lake Lizzie Drive, southeast of Nova Road and west of Druliner Road. The property consists of one parcel totaling approximately +/- 6.20 acres. This property currently has a Future Land Use Map designation of Community Center (County).

Concurrently, the applicant is requesting an Annexation (ANX25-00018 / 2025-74), and a Comprehensive Plan Amendment (CPA25-00007/Ordinance 2025-62) from Community Center (County) to Community Center (City). The Zoning Map Amendment will become effective upon the effective date of the Comprehensive Plan Amendment.

Legal Authority:
Per section 1.3.7 of the Land Development Code, The City Council shall review the recommendation from the Planning Commission and render a decision based on the recommendation and information presented. The Planning Commission recommendation is based on the 16 required findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant responses to the 16 required findings have been provided as an attachment for the City Council’s review.

Budget and Recommendation:
There is no cost associated with this item.

On October 21, 2025, the Planning Commission – Motion to recommend approval by Grigsby. Seconded by Alexander. Passed 5-0.

Staff reviewed this request for a Zoning Map Amendment on or before September 29, 2025, with no objections. Therefore, staff recommends **APPROVAL** of the request for Zoning Map Amendment for Ordinance No. 2025-76.

Finance Director's Comments:
N/A

Procurement Director's Comments:
N/A

City Manager's Comments:
City Manager recommends approval

City Council Action:
11/13/25- Final Action
10/9/25 - Motion to approve the First Reading & Introduction by Paul. Seconded by Urban. Passed 4-0.

Attachments:
1. 1 ZMA25-00012 Nova Road Community Center Staff Report CC 11.13.25
2. 2 ZMA25-00012 Nova Road Communtiy Center Ordinance 2025-76 11.13.25 CC
3. 3 ZMA25-00012 OC SCHOOLS COMMENTS

City Council Staff Report
Meeting Date: November 13, 2025

DRC Case No. /Ord. No.
ZMA25-00012/2025-76

Type of Application
Zoning Map Amendment

Case Name
Nova Road Community Center

Applicant/Owner
Mk Real Estates Investments / Bobby Kisselback

Agent
RJWA, INC / John Adams

Address/Location
North of Lake Lizzie Drive, Southeast of Nova Road and West of Druliner Road

Parcel ID #
04-26-31-0000-0190-0000

Total Land Area
+/- 6.20 acres

Project Planner
Ralph Keith
Associate Planner



Figure 1 – Aerial Map

Request
The applicant is requesting consideration of a Zoning Map Amendment from "CR" Commercial Restricted (County) and “RS-3” Residential Single Family (County) to "CCC" Community Center Core (City) for approximately +/- 6.20 acres of land. The subject property is shown in **Figure 1** above.

Background
The subject property is generally located north of Lake Lizzie Drive, southeast of Nova Road and west of Druliner Road. The property consists of one parcel totaling approximately +/- 6.20 acres. This property currently has a Future Land Use Map designation of Community Center (County).

Concurrently, the applicant is requesting an Annexation (ANX25-00018 / 2025-74), and a Comprehensive Plan Amendment (CPA25-00007/Ordinance 2025-62) from Community Center (County) to Community Center (City). The Zoning Map Amendment will become effective upon the effective date of the Comprehensive Plan Amendment.

Current Minimum and Maximum density for development on the property is as follows:

Existing FLU	***Min. Units***	***Max. Units***
Community Center (County)	*18 du/acre*	*40 du/acre*

**Calculated per gross acreage*

Current minimum percentages to be achieved at build-out, as calculated by developable area, are shown below:

FLU – Community Center "CC" (Existing)	
Individual use categories	***Minimum Percentage***
Residential	Ten (10) percent
Commercial/Office	Forty (40) percent
Public/Park/Civic	Ten (10) percent

The following table summarizes adjacent Future Land Use designations, Zoning districts and existing uses.

TABLE 1: ZONING & FUTURE LAND USE OF NEIGHBORING PROPERTIES			
Direction	***Zoning***	***Future Land Use***	***Existing Land Use***
North	**"A":** Agriculture (City)	Low Density Residential (County)	Mobile Home – Improved
East	**"RS-3"**: Residential (County)	Low Density Residential (County)	Single-Family – Improved
West	**"AC"**: Agriculture and Conservation (County)	Low Density Residential (County)	Vacant Single-Family – Improved
South	**"CCC"**: Community Center Core (County)	Community Center (County)	Multi-Family (Apartments)

Figures 2 and 3 below depict the current Future Land Use Map designations and Zoning districts within the City and Unincorporated Osceola County.

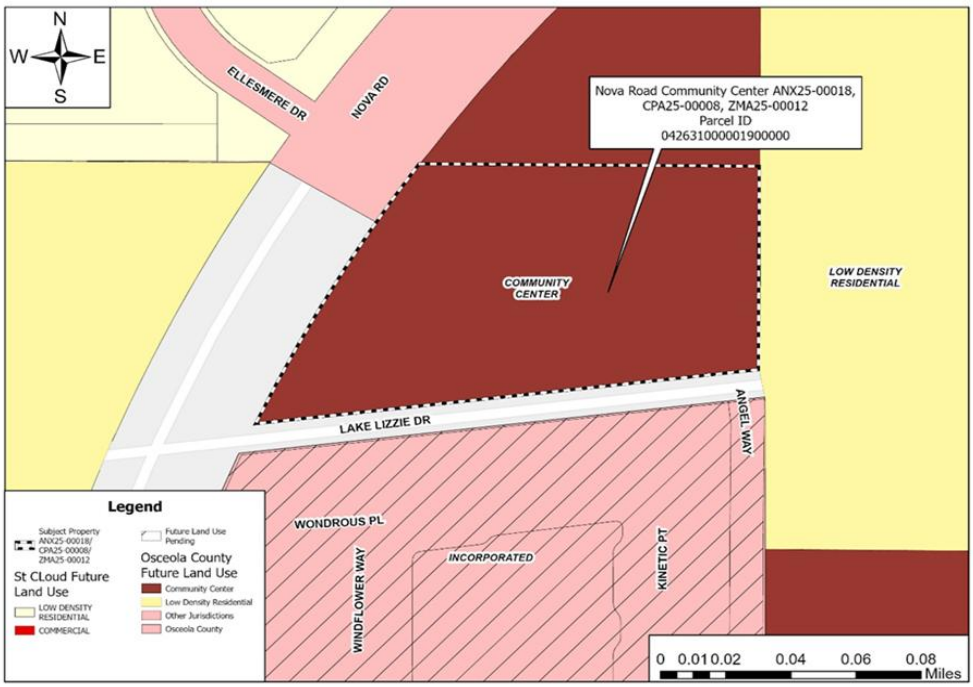


Figure 2 – Future Land Use Map

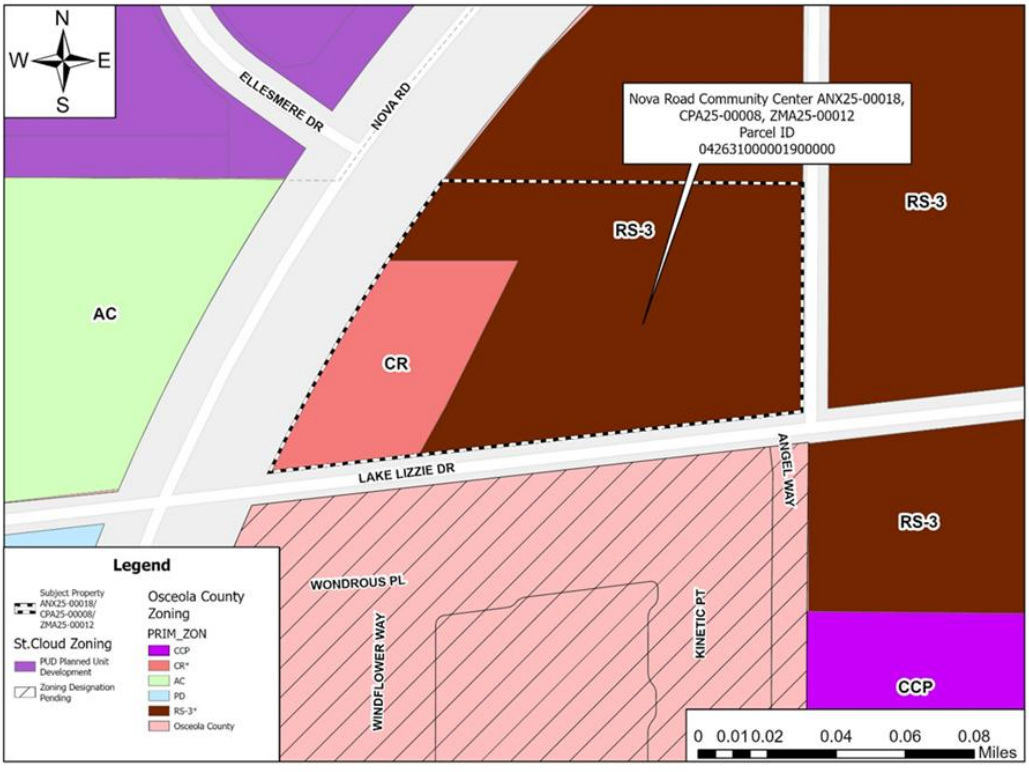


Figure 3 - Zoning Map

Public Notice

Notice of Public Hearing was mailed to property owners within 500 feet of the subject property and was advertised as required by State Statutes. No oral or written comments were received from the public at the time of this report's distribution. Additional public comment may be available at the public hearing.

Findings

Staff has reviewed the applicant's response to the 16 Required Findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant's responses follow the **bolded** LDC language, and staff's comments follow in *italics*:

1. **The proposed change is contrary to the established land use pattern;**

   "The proposed change is not contrary to the established land use pattern. The subject site already holds the Community Center Future Land Use designation under Osceola County, and the request to maintain this designation within the City of St. Cloud—along with Community Center Core zoning—ensures continuity with surrounding urban development and planned growth along Nova Road."

   The proposed change is consistent with the surrounding land use pattern and development. Currently, the subject site is currently zoned CR (Commercial Restricted) and RS-3 (Residential Single-Family) under Osceola County, the request is to rezone it to Community Center Core (CCC) within the City of St. Cloud and to apply the Community Center Future Land Use designation. This change supports the City's vision for higher-density development along key corridors like Nova Road. While allowing for a mix of retail, office, and medium to high-density residential making it compatible with nearby existing and planned developments, including multifamily housing directly to the south. The proposed change promotes continuity with the surrounding urban growth pattern and supports a more integrated and walkable community.

2. **The proposed change would create an isolated district unrelated to the adjacent and nearby districts;**

   "The proposed change will not create an isolated district. It is part of a larger pattern of developing urban nodes within the Nova Road corridor, and the Community Center Core zoning will seamlessly integrate with adjacent and nearby properties as the area continues to urbanize under the City's long-term vision."

   The proposed change would not create an isolated district. Assigning the Community Center Core (CCC) zoning designation is consistent with adjacent zoning districts and aligns with existing Urban Infill Centers in the surrounding area. Rather than introducing a disconnected zoning district, this request represents a logical expansion of the CCC zone, supporting cohesive urban development and promoting continuity with the area's planned growth.

3. **The proposed change would materially alter the population density pattern and thereby increase or overtax the load on public facilities such as schools, utilities, streets, etc.;**

   "The proposed change is not expected to materially alter density patterns or overburden public infrastructure. The site already permits higher-density mixed-use development under its current Future Land Use, and future development will be evaluated for concurrency, with necessary improvements coordinated during site plan review."

   The existing Future Land Use Designation of Community Center is compatible with the area and consistent with the requested Community Center Core Zoning District. The school capacity report indicated that this application has no impact on public school capacity.

4. **Existing district boundaries are illogically drawn in relation to existing conditions on the property proposed for change;**

"The existing zoning under Osceola County (CR & RS-3) does not match the Community Center Future Land Use designation or the City of St. Cloud's zoning framework. Applying Community Center Core zoning brings the property into logical alignment with existing conditions and implements the intended land use upon annexation."

District boundaries are not illogically drawn but are evolving pursuant to the needs of the City and the Comprehensive Plan, thus allowing for the consideration of this zoning map amendment to encourage compact development.

5. **The proposed change would be contrary to the land use plan and would have an adverse effect on the comprehensive plan;**

   "The proposed change is not contrary to the land use plan. It preserves the existing Community Center designation under the JPA and implements it through compatible City zoning. This supports the goals and policies of the City's Comprehensive Plan update and promotes coordinated urban development."

   The proposed Zoning Map Amendment is consistent with the future land use designation of Community Center and will not adversely impact the Comprehensive Plan.

6. **Change or changing conditions make the passage of the proposed amendment necessary;**

   "The proposed amendment is necessary due to annexation into the City of St. Cloud under the JPA. This transition requires City zoning to be applied consistent with the existing Community Center Future Land Use designation and the City's updated planning framework."

   The approved "CCC" zoning designations will play a vital role in shaping the development and character of the area, establishing a network of Community Center districts with varying intensities of use. The development and characteristics of the area are evolving pursuant to the needs of the City and the Comprehensive Plan, thus allowing for the consideration of this Zoning Map Amendment.

7. **The proposed change will adversely influence living conditions in the neighborhood;**

   "The proposed change will not negatively impact living conditions. Community Center Core zoning allows for a compatible mix of uses that enhance access to services and jobs, supporting a higher quality of life for surrounding residents in a walkable, planned environment."

   The proposed change will not adversely influence living conditions in the neighborhood and are consistent with the development in the area.

8. **The proposed change will create or excessively increase traffic congestion or otherwise affect public safety;**

   "The proposed zoning is not expected to cause excessive traffic congestion or harm public safety. Traffic impacts will be assessed during future development review, and the site's access to Nova Road provides a solid foundation for supporting future circulation needs."

   The proposed Zoning Map Amendment is consistent with traffic patterns and would not excessively increase traffic congestion or negatively affect public safety. Any new development would be required to go through the City's application processes for further review, and a Traffic Impact Analysis may be required at that time.

9. **The proposed change will create a drainage problem;**

   "The proposed zoning will not create a drainage issue. All development will be subject to permitting and stormwater review by the City of St. Cloud and the South Florida Water Management District, ensuring drainage compliance and protection of adjacent properties."

   Pursuant to Chapter 6 of the Land Development Code, stormwater management systems shall be

provided for all areas of development and accommodate the runoff that flows into or across the development area without additional flooding of any other lands.

10. The proposed change will seriously reduce light or air to adjacent areas;

"The proposed zoning does not allow excessive building height or massing. Development within the Community Center Core district is limited to three stories for non-residential structures, preserving access to light and air for neighboring areas while maintaining appropriate scale."

There is no development being proposed currently. At the time of any site development, standards set forth within the Land Development Code for exterior lighting would need to be followed.

11. The proposed change will adversely affect property values in the adjacent area;

"The proposed change is anticipated to have a positive influence on surrounding property values by implementing a zoning district that encourages high-quality development, improved infrastructure, and enhanced local services."

The proposed Zoning Map Amendment should not affect property values in the adjacent area..

12. The proposed change will be a deterrent to the improvement or development of adjacent property in accordance with existing regulations;

"The proposed zoning will support—not hinder—future development of nearby properties. By aligning land use and zoning with the City's updated plan, this request creates an orderly, compatible environment that fosters investment in the area."

The proposed Zoning Map Amendment is not expected to be a deterrent to the improvement or development of adjacent properties. Instead, the proposed designation represents a continuation of the area's established development pattern.

13. The proposed change will constitute a grant of special privilege to an individual owner as contrasted with the public welfare;

"This request does not constitute a special privilege. It is a necessary procedural action to apply the appropriate zoning to a site already designated for Community Center uses under the JPA. It furthers public welfare by supporting coordinated planning and managed growth."

The proposed Zoning Map Amendment does not grant special privilege to an individual owner, developer, or contrast with public welfare.

14. There are substantial reasons why a reasonable use of property cannot be accomplished under existing zoning;

"The existing Osceola County zoning (CR & RS-3) does not fully implement the Community Center Future Land Use designation. To accommodate the intended mixed-use intensity and density, City zoning must be applied, making the Community Center Core designation the appropriate and necessary zoning district."

With the adjacent parcels to the south having existing entitlements through Osceola County, this zoning amendment is a necessary step to support the logical expansion of the JPA Infill Center pattern, while ensuring consistency with the surrounding entitlements and promoting a cohesively planned growth in the area.

15. Whether the change suggested is out of scale with the needs of the neighborhood of the city;

"The proposed zoning is not out of scale. The Community Center Core zoning is specifically designed to implement a transitional level of development intensity outside of Center Cores, and its

requirements are compatible with the evolving urban fabric of this area."

The proposed "CCC" zoning district is consistent and compatible with the surrounding developments and the Community Center future land use.

16. **It is impossible to find other adequate sites in the city for the proposed use in districts already zoned for such use.**

"While other sites may hold similar designations, this property already carries the Community Center Future Land Use designation and meets locational and access criteria for Community Center development. The zoning request is an implementation step, not a land use shift, and is appropriate for this specific site."

While other areas within the City may also support a "CCC" zoning designation, this property already has a Community Center Future Land Use designation and meets the criteria for such use. The requested Zoning Map Amendment aligns with the existing land use and is appropriate for the area.

School Capacity Report

The Osceola County School District's School Capacity report indicated that this application has no impact on public school capacity.

Consistency With Strategic Plan Goals:

The proposed zoning map amendment meets the intent of the following City of St. Cloud Strategic Goals:

- ***High-Performing Government:*** *To focus on the continuity and sustainability of core public services; to become an employer of choice; and to be on the cutting-edge of technology.*

Staff Recommendation

Staff reviewed this request for a Zoning Map Amendment on or before September 29, 2025, with no objections. Therefore, staff recommends **APPROVAL** of the request for Zoning Map Amendment for Ordinance No. 2025-76

Planning Commission Recommendation

Per section 1.3.7 of the Land Development Code, The City Council shall review the recommendation from the Planning Commission and render a decision based on the recommendation and information presented. The Planning Commission recommendation is based on the 16 required findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant responses to the 16 required findings have been provided as an attachment for the City Council's review.

On October 21, 2025, the Planning Commission – Motion to recommend approval by Grisby. Seconded by Alexander. Passed 5-0

City Council Requested Action

The City Council shall review the recommendation from the Planning Commission and render a decision based on the recommendation and information presented. The Planning Commission recommendation is based on the 16 required findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant responses to the 16 required findings have been provided as an attachment for the City Council's review.

On October 9, 2025 – Motion to approve the First Reading & Introduction by Paul. Seconded by Urban. Passed 4-0.

Attachments

- Ordinance No. 2025-76
- School Capacity Report

RETURN TO:
CITY OF ST. CLOUD
DEPT OF COMMUNTIY DEVELOPMENT
1300 9TH STREET
ST. CLOUD, FL 34769

ORDINANCE NO. 2025-76

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, PROVIDING FOR THE ZONING AMENDMENT OF THE ZONING MAP OF THE LAND DEVELOPMENT CODE OF THE CITY OF ST. CLOUD, FLORIDA, SPECIFICALLY CHANGING THE ZONING DESIGNATION OF APPROXIMATELY +/- 6.20 ACRES IDENTIFIED AS NOVA ROAD COMMUNITY CENTER, PROJECT #ZMA25-00012, FROM "CR" COMMERCIAL RESTRICTED (COUNTY) AND "RS-3" RESIDENTIAL SINGLE FAMILY (COUNTY) TO "CCC" COMMUNITY CENTER CORE (CITY) GENERALLY LOCATED NORTH OF LAKE LIZZIE DRIVE, SOUTHEAST OF NOVA ROAD, AND WEST OF DRULINER ROAD, PROVIDING FOR ENTERING THE DESIGNATION ON THE OFFICIAL ZONING MAP, FILING OF THE PLANNING COMMISSION RECOMMENDATION AND PROOF OF PUBLICATION, SEVERABILITY, AND EFFECTIVE DATE.

WHEREAS, zoning districts are required to be consistent with Comprehensive Plan of the City of St. Cloud; and,

WHEREAS, the proposed zoning is consistent with the existing Future Land Use designation of "Community Center"; and,

WHEREAS, the property described below is less than five percent (5%) of the total land area of the City of St. Cloud; and,

WHEREAS, the City Council has received the recommendation of the Planning Commission dated October 21, 2025; and,

WHEREAS, the City Council has held a Public Hearing on this matter after public notice has been provided, as required by law; and,

WHEREAS, it is in the best interest of the City of St. Cloud and its citizens that the proposed rezoning be approved.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of St. Cloud, Florida, as follows:

SECTION 1:

That Ordinance No. 87-HH of the City of St. Cloud, Florida, passed and adopted October 1, 1987, and any amendments to the ordinance, being the Land Development Code of the City of St. Cloud, Florida, is hereby amended to include and designate on the Official Zoning Map a "CCC" Community Center Core zoning district classification for the property described below and as shown on Exhibit "A":

1. Parcel ID 04-26-31-0000-0190-0000

Legal Description

ALL THAT PORTION OF THE SOUTH HALF (S-1/2) OF THE SE 1/4 LYING NORTH OF OLD KISSIMMEE-MELBOURNE HIGHWAY, SECTION 4, TOWNSHIP 26 SOUTH, RANGE 31 EAST, LESS THE WEST 598 FEET THEREOF, AND LESS STATE ROAD RIGHT OF WAY, RECORDED IN O.R. BOOK 113, PAGE 120, OF THE PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA.

SUBJECT TO COVENANTS, RESTRICTIONS, AND EASEMENTS OF RECORD. SUBJECT ALSO TO APPLICABLE REAL PROPERTY TAXES FOR THE CURRENT AND SUBSEQUENT YEAR.

SUCH REAL PROPERTY OR ITS STREET ADDRESS IS COMMONLY KNOWN AS 5475 LAKE LIZZIE DRIVE, ST. CLOUD, FLORIDA 34771.

CONTAINING 269,944 SQUARE FEET OR 6.20 ACRES, MORE OR LESS.

CONTAINING 6.20 ACRES, MORE OR LESS.

Including the full width of any and all adjacent rights-of-way.

SECTION 2:

The property is rezoned to "CCC" Community Center Core, making applicable all provisions of the Land Development Code of the City of St. Cloud, Florida.

SECTION 3:

The City Manager or his/her designee is authorized and directed to promptly enter such change on the Official Zoning Map.

SECTION 4:

Upon adoption of this ordinance, the Planning Commission recommendation and "Proof of Publication" of the required Public Hearing notices shall be filed in the Department of Planning and Zoning.

SECTION 5:

If any section or portion of a section of this ordinance proves to be invalid, unlawful or unconstitutional, it shall not be held to impair the validity, force or effect of any other section or part of this ordinance.

SECTION 6:

The City Clerk, after consultation with the City Attorney, is authorized to correct scrivener's errors found by filing a corrected copy of this ordinance in the official records of the City.

SECTION 7:

Effective Date. This ordinance shall become effective upon the effective date of Ordinance No. 2024-50 (CPA24-00007) as provided by law.

First Reading on the 9th day of October 2025.

Second Reading and Final Passage on the 13th day of November 2025.

CITY OF ST. CLOUD

_____

Christian B. Robertson, Mayor

ATTEST:

_____

Ivy Llauro, City Clerk

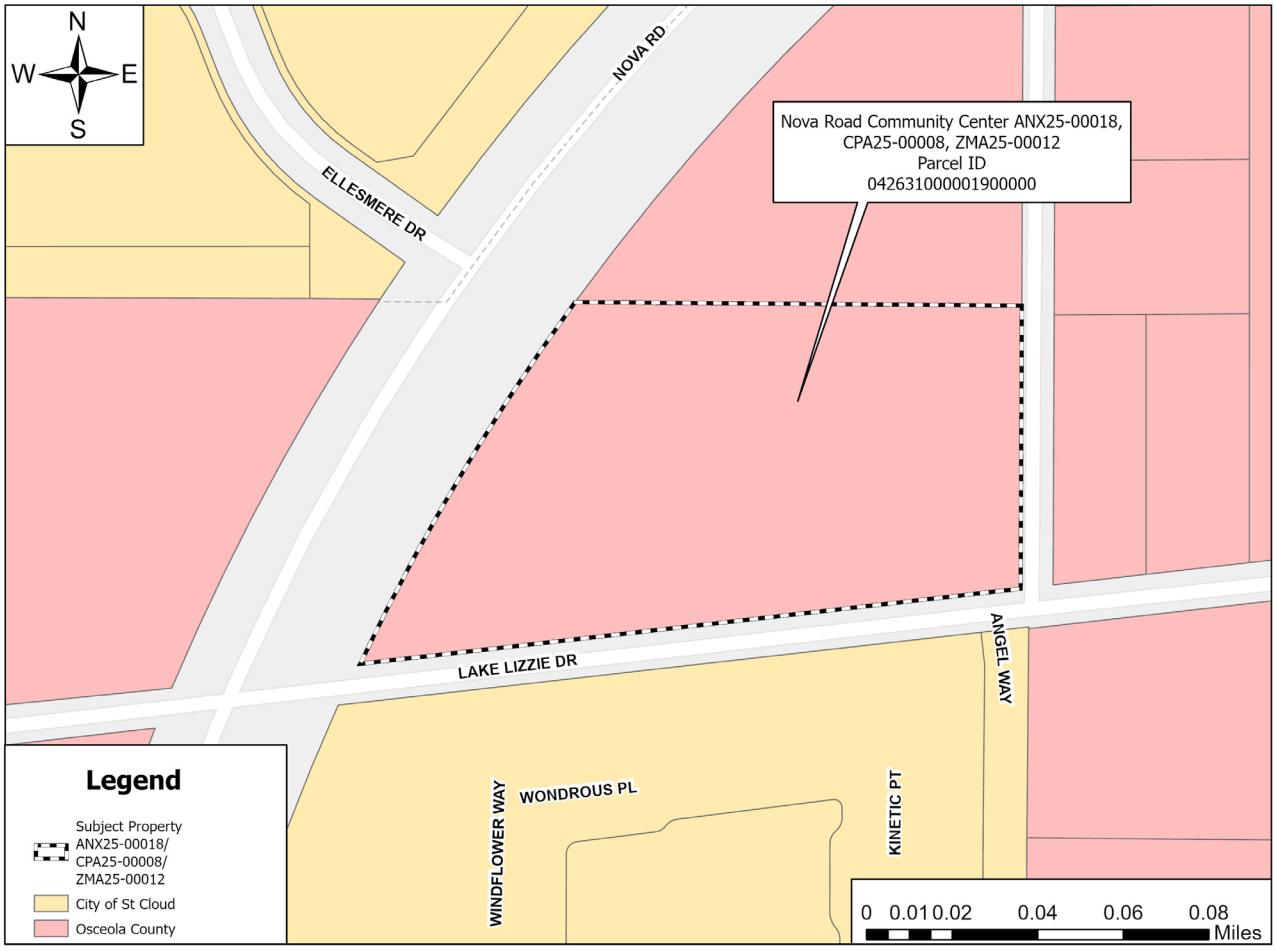
LEGAL IN FORM AND VALID IF ADOPTED:
de Beaubien, Simmons, Knight, Mantzaris & Neal, LLP

_____

Daniel F. Mantzaris, City Attorney

Pursuant to Section 695.26 (3) (f), this instrument exempt from Chapter 695, F.S.: Prepared by and return to a Public Official: City Manager, City of St. Cloud; 1300 9th Street; St. Cloud, Florida 34769

EXHIBIT "A"



PARCEL ID NO(S).
04-26-31-0000-0190-0000

THE SCHOOL DISTRICT OF OSCEOLA COUNTY, FLORIDA
PLANNING SERVICES DEPARTMENT
SCHOOL CAPACITY REPORT

SDOC#: 2025/26-0026 DRC#: ZMA25-00012

Current FLU: CC (County)
Requested FLU: CC (City)

PROJECT NAME: Nova Road Community Center

Current Zoning: RS-3
Requested Zoning: CCP

PROJECT LOCATION: 5475 Lk. Lizzie Dr., St. Cloud, 34771

COMMENTS DUE DATE: 9.11.25

PID: 04-26-31-0000-0190-0000

A more accurate report can be generated with the submittal of a detailed Site and Development Plan application which indicates the actual number of dwelling units proposed. The School District of Osceola County reserves its right to ensure proper mitigation of any impact on school capacity and the collection of Educational System Impact Fees.

Meeting: November 13, 2025

Agenda Item Type: Public Hearings
Ordinance No. 2025-78 - Entertainment District

Park & Recreation Agenda Item:
FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-78, an ordinance of the City Council of the City of St. Cloud, Florida, amending Division 27 - Entertainment District, Section 3.13.3, C.2. - outside drinking limit; G - Hours for music and entertainment, and H - Games, sporting events, and entertainment and repealing sections 3.13.3.C(5)- Permit required; (D) Entertainment District event permit; and (E) Police Protection; (F) Fire Protection and emergency medical services and providing for severability, conflicts, codification, and an effective date. (Above is full title) **ACTION ON ORDINANCE NO. 2025-78**

Strategic Key Focus Areas:
High-Performing Government

Background Information:
The Entertainment District Ordinance was adopted to support downtown revitalization by encouraging entertainment, retail, and restaurant uses within a defined boundary in the City. It provides for outdoor alcohol consumption, music, entertainment, and events within this district under specific regulations.

Previously, the ordinance required an Entertainment District Event Permit for certain activities, creating a duplicate process alongside the City's existing Special Event Ordinance. This dual requirement led to confusion for event organizers and inefficiencies in processing permits.

To streamline the process, staff has prepared an amendment that eliminates the separate Entertainment District permit provisions and instead routes all events through the Special Event Ordinance permitting process. This ensures consistency, reduces redundancy, and provides a single, clear special event permitting framework for organizers.

Legal Authority:
Land Development Code, Article 9, Sec. 2.9.1

Budget and Recommendation:
Staff recommends **APPROVAL** of Ordinance 2025-78.

Finance Director's Comments:
N/A

Procurement Director's Comments:
N/A

City Manager's Comments:

City Council Action:
10/9/25 - Motion by Paul, seconded by Urban, Passed 4-0
11/13/2025 - Final Action

Attachments:
1. 2025-78 - Entertainment District Ordinance - Staff report
2. Ordinance 2025-78 - Entertainment District (final) 9-24-25
3. Ordinance 2025-78 - Entertainment District (mark-up) 9-24-25

MEMORANDUM REPORT
FOR CITY COUNCIL
October 9, 2025

To: Mayor Robertson and Council Members

From: Stephanie Holtkamp, Parks and Recreation Director

Subject: Ordinance No. 2025-78 (First Reading) / November 13, 2025 (Second Reading)

Date: September 25, 2025

REQUEST:

The purpose of this agenda item is to request City Council approval of Ordinance No. 2025-78, amending Division 27 – Entertainment District of the Land Development Code. This ordinance removes the separate Entertainment District permit requirement for events, and such events must instead be reviewed and approved under the City's Special Event Ordinance permitting process.

BACKGROUND:

The Entertainment District Ordinance was adopted to support downtown revitalization by encouraging entertainment, retail, and restaurant uses within a defined boundary in the City. It provided for outdoor alcohol consumption, music, entertainment, and events within this district under specific regulations.

Previously, the ordinance required an Entertainment District Event Permit for certain activities, creating a duplicative process alongside the City's existing Special Event Ordinance. This dual requirement led to confusion for event organizers and inefficiencies in processing permits.

To streamline the process, staff has prepared an amendment that eliminates the separate Entertainment District permit provisions and instead routes all events through the Special Event Ordinance permitting process. This ensures consistency, reduces redundancy, and provides a single, clear special event permitting framework for organizers.

STRATEGIC PLAN GOALS:

High-Performing Government

Focus on the continuity and sustainability of core public services

Effective Community Safety

Strong collaborations and partnerships with the community

COST:
There is no cost associated with this item.

STAFF RECOMMENDATION:
Staff recommends **APPROVAL** of Ordinance No. 2025-78

Attachment – Ordinance No. 2025-78

ORDINANCE NO 2025-78

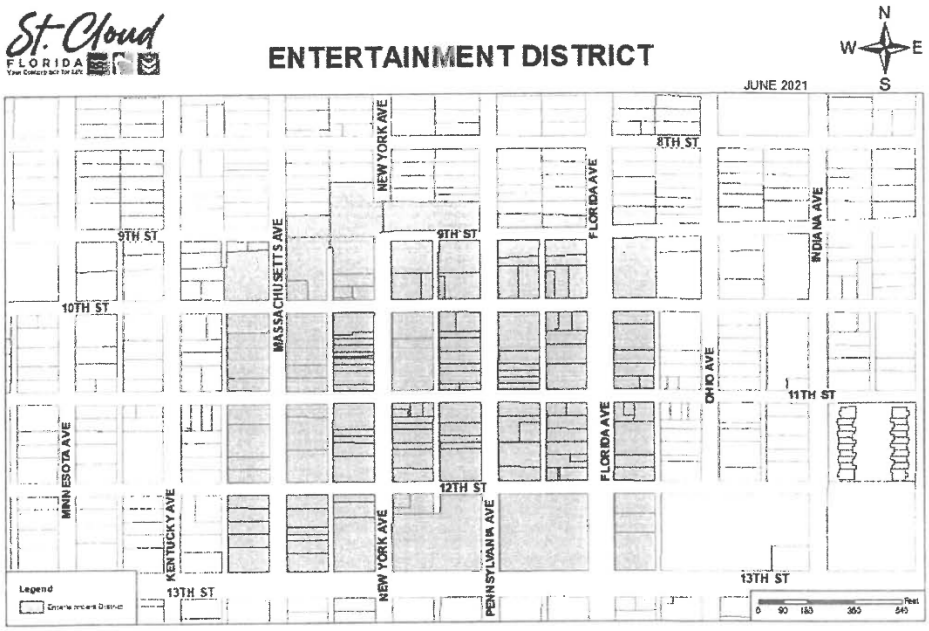
AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, AMENDING DIVISION 27 -ENTERTAINMENT DISTRICT, SECTION 3.13.3, C. 2 - OUTSIDE DRINKING LIMIT; G – HOURS FOR MUSIC AND ENTERTAINMENT, AND H – GAMES SPORTING EVENTS, AND ENTERTAINMENT AND REPEALING SECTIONS 3.13.3.C(5) - PERMIT REQUIRED; (D) ENTERTAINMENT DISTRICT EVENT PERMIT; AND (E) POLICE PROTECTION; (F) FIRE PROTECTION AND EMERGENCY MEDICAL SERVICES AND PROVIDING FOR SEVERABILITY, CONFLICTS, CODIFICATION AND AN EFFECTIVE DATE.

3.13.3. - Entertainment district.

A. *Purpose.* The purpose of this section is to encourage the location of entertainment, retail and restaurant uses within a limited defined area of the city hereafter referred to as the entertainment district. The regulations within this section create an opportunity to offer a variety of amenities to the public in a convenient physical location that will promote pedestrian use with an attendant decrease in vehicular traffic, provide for more efficient and effective public safety enforcement in a defined area, foster a mutual relationship among downtown merchants and property owners, and encourage private development of entertainment facilities which enhance and complement the use of the public facilities.

B. *District boundaries.* The entertainment district shall mean an area depicted in "Exhibit A" of the ordinance this section derives and be generally described as the area bounded by 9 th Street to the North, Florida Avenue to the East, 13 th Street to the South and Massachusetts Avenue to the West. It shall also include those properties directly adjacent to the described district boundaries for the purposes of uses described herein.

Exhibit A



C. *Outside consumption in the district.* Within the district, the following shall apply:

1. *District possession/consumption hours.* Possession/consumption of any alcoholic beverages dispensed or sold by a registered establishment is authorized within the boundaries of the district, Wednesdays to Saturdays, from 11:00 a.m. to 12:00 a.m. Extended hours of consumption for city or city-sponsored events may be granted with prior approval by the city manager and/or designee, not to exceed chapter 4, alcoholic beverages, section 4.2, hours of sale.

2. *Outside drink limit.* Any registered establishment licensed to dispense or sell alcoholic beverages by the drink for consumption on the premises is authorized to dispense an alcoholic beverage in an approved clear container for removal from the premises, as specified in this section, provided, however, that no establishment shall dispense to any person, under the legal age of alcohol drinking, as provided by law, more than one such alcoholic beverages at a time for removal from the premises, and no person shall remove at one time more than one such alcoholic beverages from the licensed premises.

3. *Size limited to 16 fluid ounces.* No person shall hold in possession on the streets and sidewalks, in parks and squares, or in other public places within the district, more than one alcoholic beverage in approved container that exceeds 16 fluid ounces in size.

4. *Drinking from a bottle, aluminum, or glass container is prohibited.* It shall be unlawful for any person to drink alcoholic beverages from a not approved container, or to possess in an open aluminum or glass container any alcoholic beverage on the streets, sidewalks, rights-of-way, and parking lots, whether public or private, except as authorized and approved as outdoor dining.

D. *Hours for music and entertainment.* Music, singing, and/or other forms of entertainment, whether amplified or not, shall be permitted indoors at any time during business hours of any facility or business enterprise within the district. Outdoor music, singing and entertainment shall be permitted until 1:30 a.m., providing compliance with the city's noise ordinance, unless otherwise permitted by way of special event permit.

E. *Games, sporting events, and entertainment.* Games, sporting events, artistic performances, farmer's markets and other such forms of organized entertainment and community events are encouraged and allowed within the entertainment district, subject to compliance with all applicable health and safety regulations and approved through the special event permitting process.

Effective Date. This Ordinance shall be effective immediately upon its adoption as provided by law.

FIRST READING ON THE 9th day of October 2025.
SECOND READING ON THE 13th day of November 2025.

PASSED AND ADOPTED by the City Council of the City of St. Cloud, this 13th day of November 2025.

CITY OF ST. CLOUD

_____

Christian B. Robertson, Mayor

ATTEST:

_____

Ivy Llauro, City Clerk

LEGAL IN FORM AND VALID IF ADOPTED:
deBeaubien, Simmons, Knight, Mantzaris & Neal

_____

Daniel F. Mantzaris, City Attorney

ORDINANCE NO 2025-78

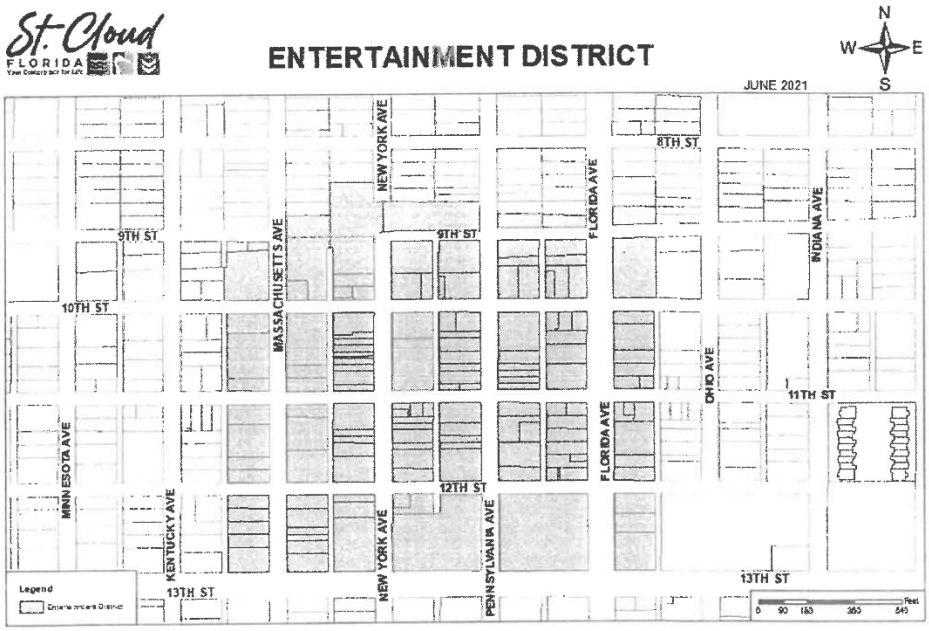
AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, AMENDING DIVISION 27 -ENTERTAINMENT DISTRICT, SECTION 3.13.3, C. 2 - OUTSIDE DRINKING LIMIT; G – HOURS FOR MUSIC AND ENTERTAINMENT, AND H – GAMES SPORTING EVENTS, AND ENTERTAINMENT AND REPEALING SECTIONS 3.13.3.C(5) - PERMIT REQUIRED; (D) ENTERTAINMENT DISTRICT EVENT PERMIT; AND (E) POLICE PROTECTION; (F) FIRE PROTECTION AND EMERGENCY MEDICAL SERVICES AND PROVIDING FOR SEVERABILITY, CONFLICTS, CODIFICATION AND AN EFFECTIVE DATE.

3.13.3. - Entertainment district.

A. *Purpose.* The purpose of this section is to encourage the location of entertainment, retail and restaurant uses within a limited defined area of the city hereafter referred to as the entertainment district. The regulations within this section create an opportunity to offer a variety of amenities to the public in a convenient physical location that will promote pedestrian use with an attendant decrease in vehicular traffic, provide for more efficient and effective public safety enforcement in a defined area, foster a mutual relationship among downtown merchants and property owners, and encourage private development of entertainment facilities which enhance and complement the use of the public facilities.

B. *District boundaries.* The entertainment district shall mean an area depicted in "Exhibit A" of the ordinance this section derives and be generally described as the area bounded by 9 th Street to the North, Florida Avenue to the East, 13 th Street to the South and Massachusetts Avenue to the West. It shall also include those properties directly adjacent to the described district boundaries for the purposes of uses described herein.

Exhibit A



C. *Outside consumption in the district.* Within the district, the following shall apply:

1. *District possession/consumption hours.* Possession/consumption of any alcoholic beverages dispensed or sold by a registered establishment is authorized within the boundaries of the district, Wednesdays to Saturdays, from 11:00 a.m. to 12:00 a.m. Extended hours of consumption for city or city-sponsored events may be granted with prior approval by the city manager and/or designee, not to exceed chapter 4, alcoholic beverages, section 4.2, hours of sale.

2. *Outside drink limit.* Any registered establishment licensed to dispense or sell alcoholic beverages by the drink for consumption on the premises is authorized to dispense an alcoholic beverage in an approved clear container for removal from the premises, as specified in this section, provided, however, that no establishment shall dispense to any person, under the legal age of alcohol drinking, as provided by law, more than one such alcoholic beverages at a time for removal from the premises, and no person shall remove at one time more than one such alcoholic beverages from the licensed premises.

3. *Size limited to 16 fluid ounces.* No person shall hold in possession on the streets and sidewalks, in parks and squares, or in other public places within the district, more than one alcoholic beverage in approved container that exceeds 16 fluid ounces in size.

4. *Drinking from a bottle, aluminum, or glass container is prohibited.* It shall be unlawful for any person to drink alcoholic beverages from a not approved container, or to possess in an open aluminum or glass container any alcoholic beverage on the streets, sidewalks, rights-of-way, and parking lots, whether public or private, except as authorized and approved as outdoor dining.

~~5. *Permit required.* Entertainment district event permit shall be required for events as defined in Chapter 8 in the entertainment district as required and approved by the city. Outside consumption shall be permitted as stated in these regulations for those events.~~

~~D. *Entertainment district event permit.* A permit shall be obtained from the city for all events held within the Entertainment District unless expressly permitted pursuant to sections 2.9.1 and 2.9.2.~~

~~E. *Police protection.* During the review process, the chief of police or his/her designee shall determine whether and to what extent additional police protection reasonably will be required for the event for purposes of traffic, crowd control, and security. If additional police protection for the event is deemed necessary by the chief of police or his/her designee, he/she shall so inform the applicant for the permit. The applicant then shall have the duty to secure police protection acceptable to the chief of police or his/her designee at the sole expense of the applicant and shall prepay the expenses of such protection as required. The chief of police or his/her designee shall consider what additional manpower, equipment and supplies are needed, as well as any other items or expenses which will be necessary.~~

~~F. *Fire protection and emergency medical services.* During the review process, the fire chief, the fire marshal, or their designee shall determine the need for on-site fire watch, crowd managers or emergency medical personnel. The fire marshal or his/her designee shall consider such factors as the location, number of anticipated participants and spectators, and type of event, including the application of appropriate codes and ordinances. If fire watch, crowd managers and/or emergency medical personnel for the event are deemed necessary by the fire chief or fire marshal, he/she shall so inform the applicant who shall have the responsibility to secure fire watch/emergency medical personnel/crowd managers reasonably acceptable to the fire chief and/or fire marshal or their designee at the sole expense of the applicant and shall prepay the expenses of such protection. Only state certified licensed professional fire/emergency medical personnel shall be used for this purpose, preferably City of St. Cloud Fire Department employees and equipment. The conduct of the event shall not introduce extraordinary hazards to fire protection and/or life safety in the immediate or adjacent areas.~~

~~G.~~D. *Hours for music and entertainment.* Music, singing, and/or other forms of entertainment, whether amplified or not, shall be permitted indoors at any time during business hours of any facility or business enterprise within the district. Outdoor music, singing and entertainment shall be permitted until 1:30 a.m., providing compliance with the city's noise ordinance, unless otherwise permitted by way of ~~an entertainment district event~~ special event permit.

~~H~~E. *Games, sporting events, and entertainment.* Games, sporting events, artistic performances, farmer's markets and other such forms of organized entertainment and community events are encouraged and allowed within the entertainment district, subject to compliance with all applicable health and safety regulations and approved through the special event permitting process.

Meeting: November 13, 2025

Agenda Item Type: Public Hearings
Ordinance No. 2025-79 Employment Commercial LDC Update

Community Development Agenda Item:
FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-79, an ordinance of the City Council of the City of St. Cloud, Florida, amending Chapter 3, "Performance and Siting Standards" of the Land Development Code, by amending Articles 2 through 16, identified as Employment Commercial LDC Update, Project # CDA25-00004, providing for severability, scrivener's errors, conflict, administrative correction, codification, publication, and an effective date. (Above is full title) **ACTION ON ORDINANCE NO. 2025-79**

Strategic Key Focus Areas:
High-Performing Government

Background Information:
On October 9, 2025, the City of St. Cloud approved proposed updates to the Future Land Use Element of the Comprehensive Plan, introducing several new future land use designations. Among these is the **JPA Employment Center Designation**, developed in partnership with Osceola County to support major employment-generating land uses and strengthen regional economic development initiatives.

This request implements the Comprehensive Plan update by establishing a corresponding zoning district within the Land Development Code. Specifically, it proposes amendments to Chapter 3 of the Land Development Code to create and codify the **Employment Commercial District** zoning designation and ensure regulatory consistency between the city's Comprehensive Plan and Land Development Code.

Legal Authority:
Section 163.3202, Florida Statutes (2025)

Budget and Recommendation:
There is no cost associated with this item.

On October 21, 2025, the Planning Commission – Motion to recommend approval by Grigsby. Seconded by Bridgeforth. Passed 5-0.

Staff recommends **APPROVAL** of Ordinance No. 2025-79.

Finance Director's Comments:
N/A

Procurement Director's Comments:
N/A

City Manager's Comments:

City Council Action:
11/13/25 - Final Action
10/9/25 - Motion to approve the First Reading & Introduction by Urban. Seconded by Paul. Passed 4-0.

Attachments:
1. 0 CDA25-00004 Employment Commercial LDC Update Staff Memo 11132025 CC
2. 1 Ordinance 2025-79 Employment Commercial LDC Update 11132025 CC2
3. 2 Ordinance No. 2025-79 Business Impact Estimate_11132025

MEMORANDUM REPORT
FOR CITY COUNCIL - ON NOVEMBER 13, 2025

To: Mayor Robertson and City Council Members

From: Caroline Horton, Senior Planner

Thru: Melissa Dunklin, CPM, Community Development Director

Subject: LDC Amendment to Chapter 3, "Performance and Siting Standards" of the Land Development Code, by amending Articles 2 through 16, identified as Employment Commercial LDC Update".
Case No. CDA25-00004 – Ordinance No. 2025-79

Date: November 13, 2025

REQUEST:

The request is to approve Ordinance No. 2025-79 for the amendment of Chapter 3, "Performance and Siting Standards" of the Land Development Code, by amending Articles 2 through 16, identified as Employment Commercial LDC Update, Project # CDA25-00004, providing for Employment Commercial standards and includes severability, scrivener's errors, conflict, administrative correction, codification, publication, and an effective date.

BACKGROUND:

On October 9, 2025, the City of St. Cloud approved proposed updates to the Future Land Use Element of the Comprehensive Plan, introducing several new future land use designations. Among these is the **JPA Employment Center Designation**, developed in partnership with Osceola County to support major employment-generating land uses and strengthen regional economic development initiatives.

This request implements the Comprehensive Plan update by establishing a corresponding zoning district within the Land Development Code. Specifically, it proposes amendments to Chapter 3 of the Land Development Code to create and codify the **Employment Commercial District** zoning designation and ensure regulatory consistency between the city's Comprehensive Plan and Land Development Code.

STRATEGIC PLAN GOALS:
Staff reviewed this request on or before September 29, 2025, with no objections. This item is consistent with the following City of St. Cloud Strategic Plan Goals:

- ***High-Performing Government:*** To focus on the continuity and sustainability of core public services; to become an employer of choice; and to be on the cutting-edge of technology.

STAFF RECOMMENDATION:
Staff recommends **APPROVAL** of Ordinance No. 2025-79.

PLANNING COMMISSION RECOMMENDATION:
On October 21, 2025, the Planning Commission – Motion to recommend approval by Grisby. Seconded by Bridgeforth. Passed 5-0.

CITY COUNCIL RECOMMENDATION:
On October 9, 2025 – Motion to approve the First Reading & Introduction by Urban. Seconded by Paul. Passed 4-0.

Attachments:

- Ordinance No. 2025-79
- Business Impact Estimate

RETURN TO:
CITY OF ST. CLOUD
DEPT. OF COMMUNITY DEVELOPMENT
1300 9TH STREET
ST. CLOUD, FL 34769

ORDINANCE NUMBER 2025-79

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, AMENDING CHAPTER 3, "PERFORMANCE AND SITING STANDARDS" OF THE LAND DEVELOPMENT CODE, BY AMENDING ARTICLES 2 THROUGH 16, IDENTIFIED AS EMPLOYMENT COMMERCIAL LDC UPDATE, PROJECT # CDA25-00004, PROVIDING FOR SEVERABILITY, SCRIVENER'S ERRORS, CONFLICT, ADMINISTRATIVE CORRECTION, CODIFICATION, PUBLICATION, AND AN EFFECTIVE DATE.

WHEREAS**,** as provided in section 2(b), Article VIII of the Constitution of the State of Florida, and section 166.021(1), Florida Statutes, the City of St. Cloud, Florida, a municipal corporation; enjoys all governmental, corporate, and proprietary powers necessary to conduct municipal government, perform municipal functions, and render municipal services, and may exercise any power for municipal purposes, except as expressly prohibited by law; and

WHEREAS**,** as provided in section 166.021(3), Florida Statutes, the governing body of each municipality in the state has the power to enact legislation concerning any subject matter upon which the state legislature may act, except when expressly prohibited by law; and

WHEREAS, the Planning Commission held a public hearing on this request on October 21, 2025, at which it made a recommendation of APPROVAL; and

WHEREAS**,** the City Council of the City of St. Cloud, Florida, deems it necessary to amend Chapter 3 "Performance and Siting Standards" of the Land Development Code of the City of St. Cloud, Florida; and

WHEREAS**,** the provisions of this Ordinance are consistent with the Goals, Objectives, and Policies of the Comprehensive Plan of the City of St. Cloud, Florida, as codified are hereby ratified and affirmed; and

WHEREAS**,** the City Council of the City of St. Cloud, Florida, has taken all actions in accordance with the requirements and procedures mandated by State law; and

WHEREAS**,** for the purpose of this Ordinance, underline type shall constitute additions to the original text, strikethrough type shall constitute deletions to the original text and **** shall constitute ellipses to the original text.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, as follows:

SECTION 1

Amend Articles 2 through 16 of Chapter 3, Performance and Siting Standards of the St. Cloud Land Development Code to read as follows:

****

ARTICLE 2 - ESTABLISHMENT AND APPLICABILITY OF DISTRICTS

3.2.1. - Establishment of districts.

In order to classify, regulate, and restrict the uses of land, water, buildings, and structures; to regulate and restrict the height and bulk of buildings; to regulate the area of yards, courts, and other open spaces between buildings; and to regulate the intensity of land use, all the area of the city is classified into the districts listed in Table 3.2.1, with each district assigned to a broad zoning category.

TABLE 3.2.1
Zoning Districts and Categories

Symbol	District	District Categories
A	Agriculture District	Agricultural
R-E	Single-Family Dwelling District	Residential
R-1	Single-Family Dwelling District	Residential
R-1A	Single-Family Dwelling District	Residential
R-1B	Single-Family Dwelling District	Residential
JPA-LDR	Single-Family Dwelling District	Residential
R-2, R-2A	One- and Two-Family Dwelling Districts	Residential
R-3	Multiple Family Dwelling District	Residential
JPA-MDI	Medium Density and Intensity District	Residential
R-4	Multiple Family Dwelling District	Residential
MH-2	Residential, Manufactured/Mobile Home District	Residential
MH-A	Residential, Manufactured/Mobile Home Annexation District	Residential
PUD	Planned Unit Development District	Residential

P	Professional District	Commercial
BC	Business Commercial District	Commercial
EC	Employment Commercial District	Commercial
NB	Neighborhood Business District	Commercial
HB	Highway Business District	Commercial
CBD-1 & 2	Central Business District	Commercial
I-1, 2 & 3	Industrial Districts	Industrial
I-2A	Industrial Sub-district	Industrial
I-3	Industrial District (Industrial PUD)	Industrial
OR	Open Space and Recreation District	Institutional
MIX	Mixed Use District	Mixed Use
HPO	Historic Preservation Overlay District	Dependent on underlying district
NCO	Narcoossee Community Overlay District	Dependent on underlying district
NCC	JPA Infill Center District	Mix of Uses
NCM	JPA Infill Center District	Mix of Uses
CCC	JPA Infill Center District	Mix of Uses
CCP	JPA Infill Center District	Mix of Uses
UCC	JPA Infill Center District	Mix of Uses
UCP	JPA Infill Center District	Mix of Uses
ECC	JPA Infill Center District	Mix of Uses
ECP	JPA Infill Center District	Mix of Uses

****

ARTICLE 6 - COMMERCIAL ZONING DISTRICTS

3.6.1. - P, Professional District.

****

B. Permitted uses.

1. Principal uses. Permitted and conditional uses allowed within the Professional District are referenced in ~~section 3.6.6~~ the Table of Permissible Uses in Commercial Districts.

****

3.6.2. - NB, Neighborhood Business District.

****

B. Permitted uses.

1. Principal uses. Permitted and conditional uses allowed within the Neighborhood Business District are referenced in ~~section 3.6.6~~ the Table of Permissible Uses in Commercial Districts.

****

3.6.3. - HB, Highway Business District.

****

B. Permitted uses.

1. Principal uses. Permitted and conditional uses allowed within the Highway Business District are referenced in ~~section 3.6.6~~ the Table of Permissible Uses in Commercial Districts.

****

3.6.4. - BC, Business Commercial District.

****

B. Permitted uses.

1. Principal uses. Permitted and conditional uses allowed within the Business Commercial District are referenced in ~~section 3.6.6~~ the Table of Permissible Uses in Commercial Districts.

****

3.6.5. - CBD, Central Business Districts 1 and 2.

****

B. Permitted uses.

1. Principal uses. Permitted and conditional uses allowed within the Central Business Districts 1 and 2 are referenced in ~~section 3.6.6~~ the Table of Permissible Uses in Commercial Districts.

****

3.6.6 - EC, Employment Commercial District.

A. *Description of district.* The Employment Commercial District implements the policies of the Comprehensive Plan to expand and diversify employment opportunities within the City. A request for rezoning to the Employment Commercial District shall only be permitted when requested by the City of St. Cloud, Osceola County, or the State of Florida, or applicant initiated with a letter of support from one of the aforementioned entities The property or subject area shall consist of contiguous properties that meet the following criteria:

1. Contiguous to 2 or more roadways classified as collector, arterial, or higher.
2. Contains a minimum of 100 acres.
3. Is not located within a Mixed Use Master Plan area or where JPA Infill Center zoning may not be appropriate.

B. *Master Plan Required*

1. Development within Employment Commercial Districts shall require a master plan, for administrative approval.

C. *Permitted uses.*

1. *Principal uses.* Permitted and conditional uses allowed within the Employment Commercial District are referenced in the Table of Permissible Uses in Commercial Districts.
2. *Accessory uses.* Uses that are customarily accessory and clearly incidental and subordinate to primary uses and structures listed above and meet the conditions in section 3.3.1.B.2 shall be permitted.

D. *Development/lot requirements.*

District	Use	Minimum Site Area (sq. ft.)	Minimum Lot Width (ft.)	Minimum Lot Depth (ft.)	Maximum Lot Coverage	Maximum Impervious Coverage	Maximum Floor Area Ratio
EC	Employment Commercial	N/A	N/A	N/A	100%	100%	2.50

E. *Yard Requirements.*

District	Use	Front on Primary Street (ft.)	Side (ft.)	Side on Secondary Street (ft.)	Rear (ft.)
EC	Employment Commercial	N/A	N/A	N/A	N/A

F. *Height.*

District	Land Use	Maximum Building Height (ft.)
EC	Employment Commercial	N/A

G. *Density Requirements.*

District	Use	Minimum Dwelling Units per Acre	Maximum Dwelling Units per Acre
EC	Employment Commercial	N/A	N/A

H. *Open space requirements.* See chapter 4, article 9 of the LDC.

I. *Parking.*

1. *Parking space setback.* Parking in the Employment Commercial District shall be allowed in any required yard with appropriate setbacks established in chapter 4, article 2 of this Code, with the exception of standards provided within this article for the Employment Commercial District, but shall not encroach into any required landscaped or buffer area per chapter 4, article 8 of the LDC.

2. *Minimum off-street parking requirements for the following uses within the Employment Commercial District shall be as follows:*

   a. Multi-tenant Industrial Uses: One space for each 500 square feet of gross floor area.

   b. Warehouses: One space for each 3,000 square feet of gross floor area.

   c. Shopping Centers: Less than 75,000 square feet – one space for each 300 square feet of gross floor area; or 75,000 square feet or greater – one space for each 400 square feet of gross floor area.

   d. Manufacturing: One space for each 1,000 square feet of gross floor area.

3. *Parking areas.* All parking areas and drives used by the public in the Employment Commercial District shall be completed in accordance to the city's design requirements and adopted engineering standards.

J. *Sign regulations.* All signage shall comply with the City's existing regulations, unless a Master Signage Plan is included and approved with the Employment Commercial District Master Plan.

K. *Landscape and buffer requirements.* Landscape and buffer requirements in this zoning district must be in accordance with article 8 of chapter 4 of the LDC.

L. *Supplemental district regulations.*

1. *Outside storage.* Businesses within the Employment Commercial District shall be permitted to have outside storage of parts, supplies, materials or equipment, subject to screening requirements from adjacent properties and rights-of-way, and in compliance with design standards and requirements identified in chapter 3, article 14 of the LDC.

2. *Fencing.* Fencing in the Employment Commercial District shall be allowed within the side and rear yards as authorized by section 3.15.3 of these regulations. If a side or rear yard abuts a right-of-way in the Employment Commercial District, such side or rear yard fencing must meet a required 5-foot setback. Such fencing shall be constructed of a durable, uniform, weather resistant, rust proof material, and shall not include barbed wire fencing except where mandated by law. All fencing in the Employment Commercial District shall be approved by the city manager or his designee and maintained as originally approved for permitting.

3. *Required screening.* In the Employment Commercial District, such minor outside mechanical equipment typically attached or integral to a structure as air conditioners, compressors, propane tanks, electrical transformers solely used by that property, etc., as determined by the city manager or his designee, shall be screened with opaque material from view from any street rights-of-way. This requirement shall not apply to fire suppression equipment.

****

3.667 Permitted uses in commercial districts.

The following is a listing of uses permitted in the commercial zoning districts. Each use is listed with a "P" for permitted by-right, or "C" for conditional use within each zoning district column. Those uses listed in zoning district's column with neither a "P" or "C" shall be considered prohibited.

TABLE 3.6.6.7.1
Permissible Uses in Commercial Districts

USES	P	NB	EC	HB	BC	CBD-1	CBD-2
Adult congregate living facility	C	C		C	C	P	P
Adult day care center	C	C	P	C	P	C	C
Alcoholic beverage establishments (see section 3.14.5)			P	C	P	P	C
Aluminum products, sales and contractor			P	P	P	C	C
Amusement and commercial recreation, outdoors				C	C		
Amusement and commercial recreation, in an enclosed building			P	P	P		
Analytical chemist	P		P	P	P	C	C
Answering service	P		P	P	P	P	P
Antique shop		P	P	P		P	P
Appliances, sales and service			P	P	P	P	P
Apartments, condominiums, townhouses				C		P	P
Artist and photographic studios		P	P	P	P	P	P
Auction houses			P	P	P	C	C
Auditorium			P	P	P		
Automobile:							
Body work and painting				C	C		
Frame repair					C		

Minor mechanical repair				P	P		
Major mechanical repair				C	P		
Parts and supplies				P	P	P	P
Quick wash				P	P		
Sales and rental				P	P		
Service station				P	P		
Tire repair and replacement				P	P		
Towing and wrecker service				C	P		
Window tinting				P	P		
Bakeries, most goods sold on premises at retail (not wholesale)		P	P	P	P	P	P
Banks and financial institutions	C	P	P	P	P	P	P
Barbershops and beauty shops	C	P	P	P		P	P
Bed and breakfast establishments				P		P	P
Bicycle, sales and service			P	P	P	P	P
Bioanalytical labs	P		P	P	P	C	C
Boardinghouse				P		P	P
Boat, major repair				C	P		
Boat sales, minor service and rental				P	P		
Body piercing (licensed by state)				P	P	P	P
Bondsman				P	P	P	P
Book, stationery, and newsstands		P	P	P		P	P
Building material, retail			P	P	P		
Building material, wholesale			P		C		
Building products manufacturing			P	C	C		

Cabinetry, metal, and woodworking shops			P	C	P		
Catering only (no restaurant facilities)		C	P	P	P	C	C
Cemetery	P						
Child care centers—Day nurseries and kindergarten	C	C	P	C	P	C	C
City government offices & facilities	P	P	P	P	P	P	P
Civic club			P	P	P	P	P
Clairvoyant, fortuneteller				C	C	C	C
Clinics, medical and/or dental	P		P	P	P	P	P
Coffee roasting			P		P	C	C
Communication facilities, including tower (See section 3.14.29)	P [1]		P	P [1]		P [1]	
Community center	P	P				C	C
Contractor (business office only)			P	P	P	P	P
Contractor's equipment, storage yards, provided open storage regulations are met			P	C			
Convenience stores with gasoline pumps		C		P	P		
Convenience stores without gasoline pumps		P	P	P	P	P	P
Dance and music studios		C	P	P	P	P	P
Data processing center		C	P	P			
Dental/medical laboratories	P		P	C			
Dive shop		P	P	P	P	P	P
Drug store	P	P	P	P	P	P	P
Educational facility:							
College or university	P		P	P	P	C	C
Public or private school	P	P	P	P	P	P	P

Vocational school	P		P	P	P	C	C
Employment agencies			P	P	P	P	P
Equipment rental—Major				C	C		
Equipment rental—Minor				C	P	C	C
Equipment sales—Major				C	C		
Equipment sales—Minor				C	P	C	C
Exterminating service			P	C	P		
Farm and garden supplies, including nursery stock, landscaping, garden center, sod, feed and grain		C	P	P	P		
Filling stations (see Automobile service stations)							
Fire stations and police stations	P	P	P	P	P	P	P
Florist and gift shops		P	P	P		P	P
Food hall		P	P			P	P
Food stores or specialty food stores (i.e., retail sales of meat, fish, eggs, poultry, fruit, vegetables, candy, nuts, coffee, tea, confectionery, delicatessen, dairy products and health foods; stores carrying a variety of food or related goods or groceries)		P	P	P	P	P	P
Frozen food locker					C		
Funeral homes	C			P	P	P	P
Furniture sales			P	P	P	P	P
Furniture refinishing when in conjunction with retail sales			P	C	P		
Gun range, indoor				C	C		
Government offices	P		P	P	P	P	P
Gymnastic/health spa facilities	C	C	P	P	P	P	P
Hardware		P	P	P	P	P	P

Heliport	C		P	C	C		
Hobby and craft shops		P	P	P	P	P	P
Home health agency	P	P	P	P	P	P	P
Home occupations	P	P		P		P	P
Hospitals and nursing homes	P		P	C	P		
Hotels, motels, motor hotels, motor lodges and tourist courts			P	P		P	P
Interior decorating and window treatment			P	P	P	P	P
Janitorial service and supplies			P	P	P	C	C
Kennels (inside boarding only)				C	P	C	C
Kennels (with animal "runs" outside)				C	C		
Laundromats and dry cleaning establishments for general retail trade, on-premises or off-premises cleaning; does not include distribution centers	C	P		P	P	C	C
Lawnmower, sales and service				C	C	C	C
Limousine rental service (see City Code)				P	P	C	C
Locksmith			P	P	P	P	P
Lumber store				C	P		
Manufacturing, light			P		P		
Massage therapist (licensed)	P	P	P	P	P	P	P
Medical offices	P	P	P	P	P	P	P
Micro-beverage manufacturing			P	P	P	P	P
Mini warehouses and storage facilities, outside storage permitted (See sec. 3.14.23)				P	C		
Mobile food dispensing vehicles ("food trucks")			C	C			
Mobile home sales lots				C	C		

Multifamily residential						P	P
Office, business and professional	P	P	P	P	P	P	P
Open-air market (see definition)				C	C	C	C
Packaging, parcel and mail service	P	P	P	P	P	P	P
Pawnshop				P	P		
Pet stores and/or grooming		P	P	P	P	P	P
Pharmacy	P	P	P	P		P	P
Places of worship, with their attendant educational/recreational building, excluding schools	P	P	P	P	P	C	C
Pools/spas, retail and service				P	P		
Pools/spas, retail only, no outside display or equipment storage		P	P	P	P	P	P
Post offices	P	P	P	P	P	P	P
Printing and duplicating, retail		P	P	P	P	P	P
Private clubs and lodges			P	P	P	C	C
Produce stand				C		C	C
Public:							
Arboretums, museums	P		P	P	P		
Cultural institutions			P	P		P	P
Golf courses	P	P		P	P		
Gun range, municipal	C						
Libraries	P	P	P	P	P	P	P
Parks, parkways, playgrounds	P	P	P	P	P	P	P
Playfields, land resources	P	P	P	P	P	P	P
Seaplane base							

Utility buildings and facilities necessary to serve surrounding neighborhoods (not including storage or service yards)	C	C	P	C	C	C	C
Utility structures			P		C	C	C
Radio and TV broadcasting studios and offices, excluding towers			P	P	P	C	C
Radio, TV and electronic sales and service			P	P	P	P	P
Repair shops, minor services (i.e., shoes, jewelry, electronics, small appliances		P	P	P	P	P	P
Residential recovery center, minor	C						
Residential uses including all customary accessory buildings in existence (See chapter 3, article 14)	C	C		C		C	C
Restaurants, delivery and/or carry-out, more than 1,500 square feet			P	P	P	P	P
Restaurants, delivery and/or carry-out, provided gross floor area does not exceed 1,500 square feet, unless such delivery and/or carry-out is accessory or ancillary to a full-service restaurant, then square footage restrictions of full-service restaurants apply	P	P	P	P	P	P	P
Restaurants, full-service (See chapter 3, article 14)	P	P	P	P	P	P	P
Retail assembly shops			P		P		
Retail, general (i.e., department, hardware, paint, wallpaper, sporting goods, jewelry, computers, luggage, toy, wearing apparel stores)			P	P	P	P	P
Rooming houses						P	P
Screen printing			P	C	P	C	C
Short-term rental (residential)						C	C
Tailoring shops		P	P	P	P	P	P

Tattoo parlors (licensed by state)				P	P	P	P
Taxi service (see City Code)				P	P	C	C
Telephone business offices and exchanges	P		P	P			
Theaters			P	P	P	P	P
Thrift stores	C		P	P	P	P	P
Timeshare/interval ownership				C		C	C
Tobacco shops		P	P	P		P	P
Transient lodging establishments				C		C	C
Travel agents	C	P	P	P	P	P	P
Truck repair shop					C		
Upholstery			P	P	P	P	P
Vehicles for hire (i.e., U-Haul, Ryder, etc.)				C	P		
Veterinary clinic and animal hospitals			P	P	P		
Video rental store						P	P
Welding			P		C		
P = Permitted use by-right C = Conditional use							
Notes: [1] Development and design standards apply.							

****

3.14.29. - Communication tower facility regulations.

A. *Purpose*. The purpose of this section is to establish specific criteria for the siting of communication towers and antennas. The goals of this section are:

1. Protect and promote the public health, safety, and general welfare of the residents of the City;
2. Accommodate the growing need for communication towers and enhance the ability of the provider's wireless communication services to provide to the community reliable wireless communication services;

3. Protect residential areas and land uses from potential adverse impacts of towers and antennas;
4. Provide for the appropriate location and development of telecommunication facilities within the municipal limits and minimize the total number of towers throughout the community;
5. Encourage users of communication towers and antennas to configure them in a way that minimizes the adverse visual impact of the telecommunication towers and antennas through careful design, siting, landscape screening, and innovative camouflaging techniques; and
6. Minimize potential damage to property from telecommunication towers and facilities by requiring such structures be soundly designed, constructed, modified, and maintained.

   In furtherance of the purposes stated above, the City shall at all times give due consideration to the City's comprehensive plan, zoning map, existing land uses, and environmentally sensitive areas, including hurricane preparedness areas, in approving sites for the location of communication facilities.

B. *Applicability.*

1. All new wireless communication facilities and any reconstruction or modifications to existing wireless communication facilities in the city shall be subject to the regulations in this chapter to the full extent permitted under applicable state and federal law.
2. The following type of wireless communication facilities shall be prohibited:
   a. Lattice Tower Facility
   b. Guyed Tower Facility
   c. Mobile Tower Facility (Except during a declared state of emergency for the proposed location or in conjunction with an active building permit for repair of an existing tower facility.)
3. *Broadcasting facilities/amateur radio station operators/receive only antennas.* This chapter shall not govern any broadcasting facility or a wireless communication facility owned and operated by a federally-licensed amateur radio station operator or which is used exclusively for receive only antennas; however, requests for placement of an amateur radio antenna in the city shall be processed in accordance with applicable law.

4. Nothing in this chapter is intended to prohibit Small or Micro wireless facilities as defined in Florida Statutes 337.401(7) "Advanced Wireless Infrastructure Deployment Act".
5. Public Safety Exemption. All government communication towers with public safety systems or equipment shall be exempted from the siting standards of this section. Any such exemptions shall not be considered as precluding the co-location or other service providers. Any co-location on government communication towers, sites or government property by other than for public safety systems or equipment shall comply with the co-location standards and requirements herein.

C. General Requirements.

1. *Permitted Use.* New towers, antennas, and other communication facilities shall be considered a permitted use as indicated in sections 3.4.1.B, 3.6.6, 3.7.4, and 3.8.1.B, and subject to all of the requirements related to permitted uses regulations within their respective zoning district.
   a. New towers, antennas and other communication facilities shall be considered a permitted use <u>within Community Centers, Urban Centers, and Employment Centers place types,</u> subject to Mixed Use District Development Standards and development and design standards herein.
   b. <u>New towers, antennas and other communication facilities shall be considered a permitted use within the Employment Commercial (EC) zoning district, subject to any applicable requirements.</u>

****

3.16.10. - Permanent signs.

Except with regard to certain temporary and/or exempt signs, it shall be unlawful to erect, maintain or display any sign that is not in compliance with the following provisions. Signage not specifically allowed in a zoning district shall be considered prohibited.

Table 3.16.10 shows signs which are allowed in each zoning district. Refer to the appropriate section below for more detailed regulations for each type of sign.

TABLE 3.16.10 **Signs allowed in each non-residential zoning district**					
Sign type	HB, EC, BC	P, OR	NB	I-1, I-2 & I-2A	CBD-1, CBD-2
Freestanding	X	X	X	X	X
Wall	X	X	X	X	X
Awning/Marquee	X	X	X	X	X
Projecting	X				X
On-site directional	X	X	X	X	
Menu	X	X	X		X
Drive-in service	X	X	X	X	
Integrated shopping center	X			X	
Electronic variable message center	X			X	

A. *Highway business (HB), Employment Commercial (EC), and business commercial (BC).*

****

SECTION 2

The City Clerk, after consultation with the City Attorney, is authorized to correct scrivener's errors found by filing a corrected copy of this ordinance in the official records of the City.

SECTION 3 SEVERABILITY.

It is declared to be the intent of the City Council that, if any section, subsection, sentence, clause, phrase, or portion of this Ordinance is for any reason held invalid or unconstitutional by a court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision, and such holding shall not affect the validity of the remaining portions thereof.

SECTION 4 CONFLICT.
This action supersedes all codes and ordinances of the City or parts of, in conflict with this ordinance, to the extent of the conflict.

SECTION 5 CODIFICATION.
Section 1 of this Ordinance shall be codified in the Land Development Code for the City of St. Cloud, Florida, separate and apart from the Code of St. Cloud. The codifier is authorized to make editorial changes not affecting the substance of this ordinance in the substitution of "article" for "ordinance", "section" for "paragraph", or otherwise take such editorial license.

SECTION 6 PUBLICATION AND EFFECTIVE DATE.
This Ordinance shall be published as provided by law and it shall become law and shall take effect immediately upon its Second Reading and Final Passage.

First Reading on the 9th day of October 2025.

Second Reading on the 13th day of November 2025.

CITY OF ST. CLOUD

_____
Christian B. Robertson, Mayor

ATTEST:

_____
Ivy Llauro, City Clerk

LEGAL IN FORM AND VALID IF ADOPTED:
DeBeaubien, Simmons, Knight, Mantzaris & Neal, LLP

_____
Daniel F. Mantzaris, City Attorney

Pursuant to Section 695.26 (3) (f), this instrument exempt from Chapter 695, F.S.: Prepared by and 106 return to a Public Official: City Manager, City of St. Cloud, 1300 9th Street, St. Cloud, Florida 34769.

BUSINESS IMPACT ESTIMATE
ORDINANCE NO. 2025-79

TO: Mayor Robertson and Council Members

FROM: Caroline Horton, Senior Planner

THRU: Melissa Dunklin, CPM, Community Development Director

DATE: October 21, 2025

SUBJECT: Ordinance No. 2025-79 - Business Impact Estimate

Section 166.041, *Florida Statutes*, effective July 1, 2023, requires the City prepare (or cause to be prepared) a business impact estimate prior to final consideration of an ordinance, subject to exemptions noted in the Law. The new law requires that the business impact estimate be posted on the City's website at the time of the published notice of the City Council's final consideration of the ordinance, or ten (10) days prior to the adoption public hearing, whichever is longer. Ordinance No. 2025-79 is proposed to be adopted by the City on November 13, 2025, and is subject to this new requirement. Following are the categories required to be addressed for the proposed ordinance based on the new legislation:

1. Summary of proposed Ordinance No.: 2025-79.

The request is to approve Ordinance No. 2025-79 for the amendment of Chapter 3, "Performance and Siting Standards" of the Land Development Code, by amending Articles 2 through 16, identified as Employment Commercial LDC Update, Project # CDA25-00004, providing for Employment Commercial standards and includes severability, scrivener's errors, conflict, administrative correction, codification, publication, and an effective date.

Staff initiated this request to update the Land Development Code (LDC) to correspond with proposed updates to the Future Land Use Element of the Comprehensive Plan with an adoption hearing scheduled for October 9, 2025. Anticipated updates to the City of St. Cloud Future Land Use Element designations necessitated corresponding zoning district classifications and standards to be included in the Land Development Code.

2. Estimate of the direct economic impact of the proposed ordinance on private, for-profit businesses in the city

a. Estimate of direct compliance costs that businesses may reasonably incur if the ordinance is enacted.

The proposed ordinance shall have no effect to cost on any business located within the City.

b. Identification of any new charge or fee on businesses subject to the proposed ordinance or for which businesses will be financially responsible.

The proposed ordinance does not identify any new charges or fees on businesses.

c. An estimate of the City's regulatory costs, including an estimate of revenues from any new charges or fees that will be imposed on businesses to cover such costs.

The City will not collect any regulatory cost should this ordinance be adopted; as no new charges or fees will be imposed on businesses by the City.

3. A good faith estimates of the number of businesses likely to be impacted by the ordinance.

Adoption of the proposed ordinance should have no negative impact on businesses.

4. Any additional information the board determines may be useful.

Adoption of the proposed ordinance should have no negative impact on businesses.

Meeting: November 13, 2025

Agenda Item Type: Public Hearings
Ordinance No. 2025-80 NeoCity South ZMA

Community Development Agenda Item:
FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-80, an ordinance of the City Council of the City of St. Cloud, Florida, providing for the Zoning Amendment of the Zoning Map of the Land Development Code of the City of St. Cloud, Florida, specifically changing the zoning designation of approximately +/- 327.4 acres identified as NeoCity South, Project #ZMA25-00016, from "A" Agriculture to "EC" Employment Commercial, generally located north of Clay Whaley Road, east of C31 Saint Cloud Canal, south of Cross Prairie Parkway and west of Florida's Turnpike, providing for amending the official Zoning Map, filing of the Planning Commission recommendation and proof of publication, applicability and effect, severability, copies on file and effective date. (Above is full title) **ACTION ON ORDINANCE NO. 2025-80** (This is a Quasi-Judicial proceeding)

Strategic Key Focus Areas:
High-Performing Government

Background Information:
The subject property is generally located north of Clay Whaley Road, east of C31 Saint Cloud Canal, south of Cross Prairie Parkway and west of Florida's Turnpike. The property consists of seven parcels totaling approximately +/- 327.4 acres. This property currently has a Future Land Use Map designation of "MDR" Medium Density Residential.

Concurrently, the parcels are included in the Future Land Use Element Comprehensive Plan Amendment (CPA24-00007/Ordinance 2024-50) which requests a Future Land Use Map designation of Employment (City). The Future Land Use Element Comprehensive Plan Amendment was approved at the City Council Meeting on October 9, 2025 and the Adopted Amendment Package has been submitted for State Coordinated Review.

Legal Authority:
Per section 1.3.7 of the Land Development Code, The City Council shall review the recommendation from the Planning Commission and render a decision based on the recommendation and information presented. The Planning Commission recommendation is based on the 16 required findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant responses to the 16 required findings have been provided as an attachment for the City Council's review.

Budget and Recommendation:
There is no cost associated with this item.

On October 21, 2025, the Planning Commission – Motion to recommend approval with the conditions as stated by staff by Grigsby. Seconded by Douglas. Passed 5-0.

Staff reviewed this request for a Zoning Map Amendment on or before September 29, 2025, with no objections. Therefore, staff recommends APPROVAL of the request for Zoning Map Amendment for Ordinance No. 2025-80, subject to the following condition(s):

1) The re-alignment of Cross Prairie Parkway and Southbury Drive and any related lot reconfigurations may be administratively approved by the City Manager or designee to expedite the review process for the construction of these framework roadways.

Finance Director's Comments:
N/A

Procurement Director's Comments:
N/A

City Manager's Comments:
City Manager recommends approval

City Council Action:
11/13/25 - Final Action.
10/09/25 - Motion to approve the First Reading & Introduction by Paul. Seconded by Urban. Passed 4-0.

Attachments:
1. 0 ZMA25-00016 NeoCity South Staff Report_11132025 CC
2. 1 ZMA25-00016 NEOCITY SOUTH ORDINANCE NO. 2025-80 111325 CC2
3. 3 ZMA25-00016 SCHOOLS COMMENTS 11132025 CC

City Council Staff Report
Meeting Date: November 13, 2025

DRC Case No. /Ord. No.
ZMA25-00016/2025-80

Type of Application
Zoning Map Amendment

Case Name
NeoCity South

Applicant/Owner
Osceola County

Agent
RJWA, Inc. – John Adams

Address/Location
North of Clay Whaley Road, east of C31 Saint Cloud Canal, south of Cross Prairie Parkway and west of Florida's Turnpike

Parcel ID #
26252905150030310
08263000U000120000
26252905150030060
26252905150030070
26252905150029010
26252905150029110
09263000U000600000

Total Land Area
+/- 327.4 acres

Project Planner
Caroline Horton
Senior Planner

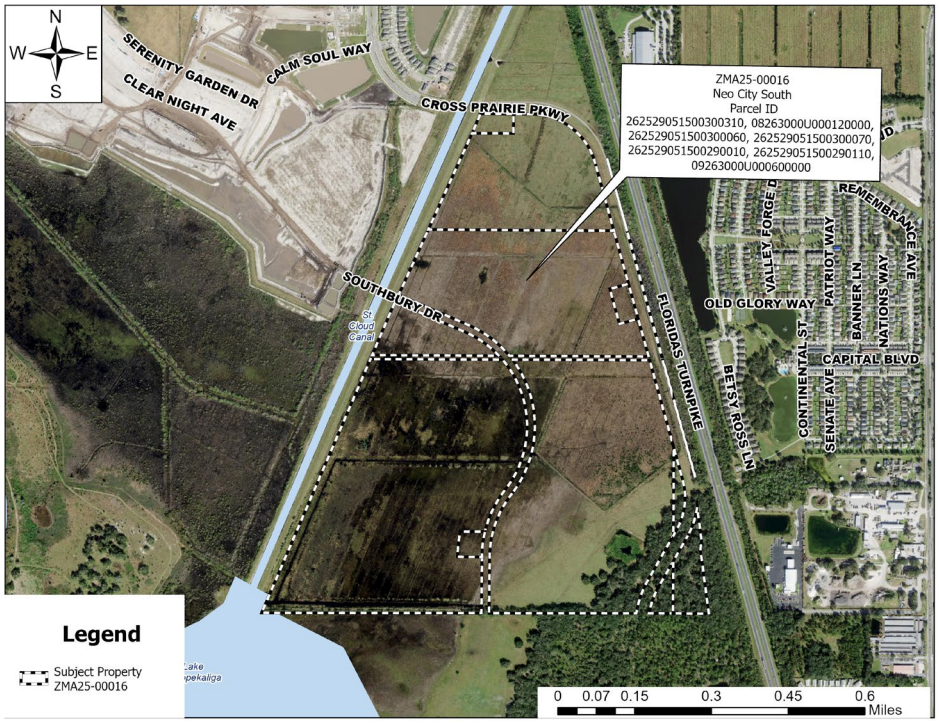


Figure 1 – Aerial Map

Request
The applicant is requesting consideration of a Zoning Map Amendment from "A" Agriculture to "EC" Employment Commercial for approximately +/- 327.4 acres of land. The subject property is shown in **Figure 1** above.

Background
The subject property is generally located north of Clay Whaley Road, east of C31 Saint Cloud Canal, south of Cross Prairie Parkway and west of Florida's Turnpike. The property consists of seven parcels totaling approximately +/- 327.4 acres. This property currently has a Future Land Use Map designation of "MDR" Medium Density Residential.

Concurrently, the parcels are included in the Future Land Use Element Comprehensive Plan Amendment (CPA24-00007/Ordinance 2024-50) which requests a Future Land Use Map designation of Employment (City). The Future Land Use Element Comprehensive Plan Amendment was approved at the City Council Meeting on October 9, 2025 and the Adopted Amendment Package has been submitted for State Coordinated Review.

The State Land Planning Agency has 45 days after receipt of a complete adopted plan amendment package to issue a Notice of Intent to find plan amendment either in compliance or not in compliance. The plan amendment will go into effect pursuant to the State Land Planning Agency's Notice of Intent if FloridaCommerce finds the plan amendment in compliance and no challenge is filed by an affected party when the Notice of Intent is posted to the State Land Planning Agency's web site. The Zoning Map Amendment will become effective upon the effective date of the Comprehensive Plan Amendment.

The following table summarizes adjacent Future Land Use designations, Zoning districts and existing uses.

TABLE 1: ZONING & FUTURE LAND USE OF NEIGHBORING PROPERTIES

Direction	*Zoning*	*Future Land Use*	*Existing Land Use*
North	"AC" Agricultural Development and Conservation (County)	Pending (City)	Park/Open Space
East	"PUD" Planned Use Development (City), "P" Professional (City)	Medium Density Residential (City), Public/Institutional (City)	Single-Family – Improved County Facilities
West	"MXD" Mixed Use (County)	Mixed Use (City)	Mixed Use Residential
South	"MIX" Mixed Use (City)	Mixed Use (City)	Mixed Use Residential

Figures 2 and 3 below depict the current Future Land Use Map designations and Zoning districts within the City and Unincorporated Osceola County.

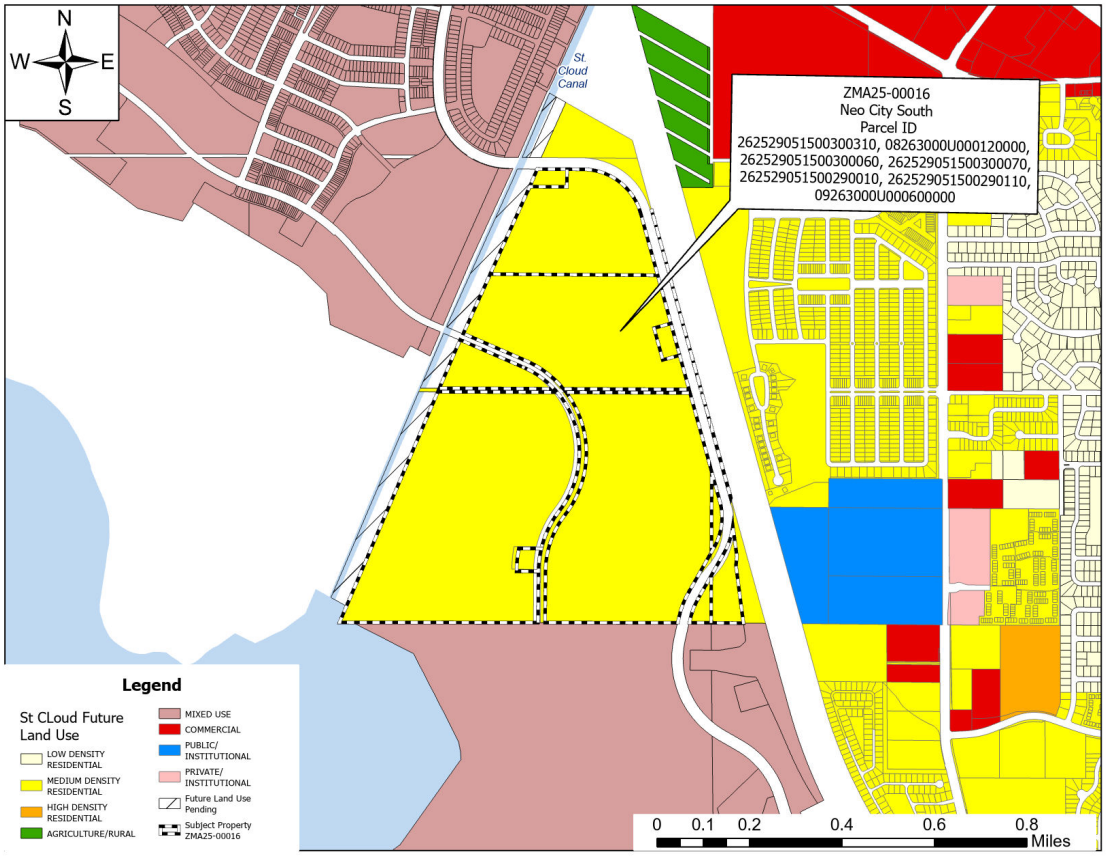


Figure 2 – Future Land Use Map

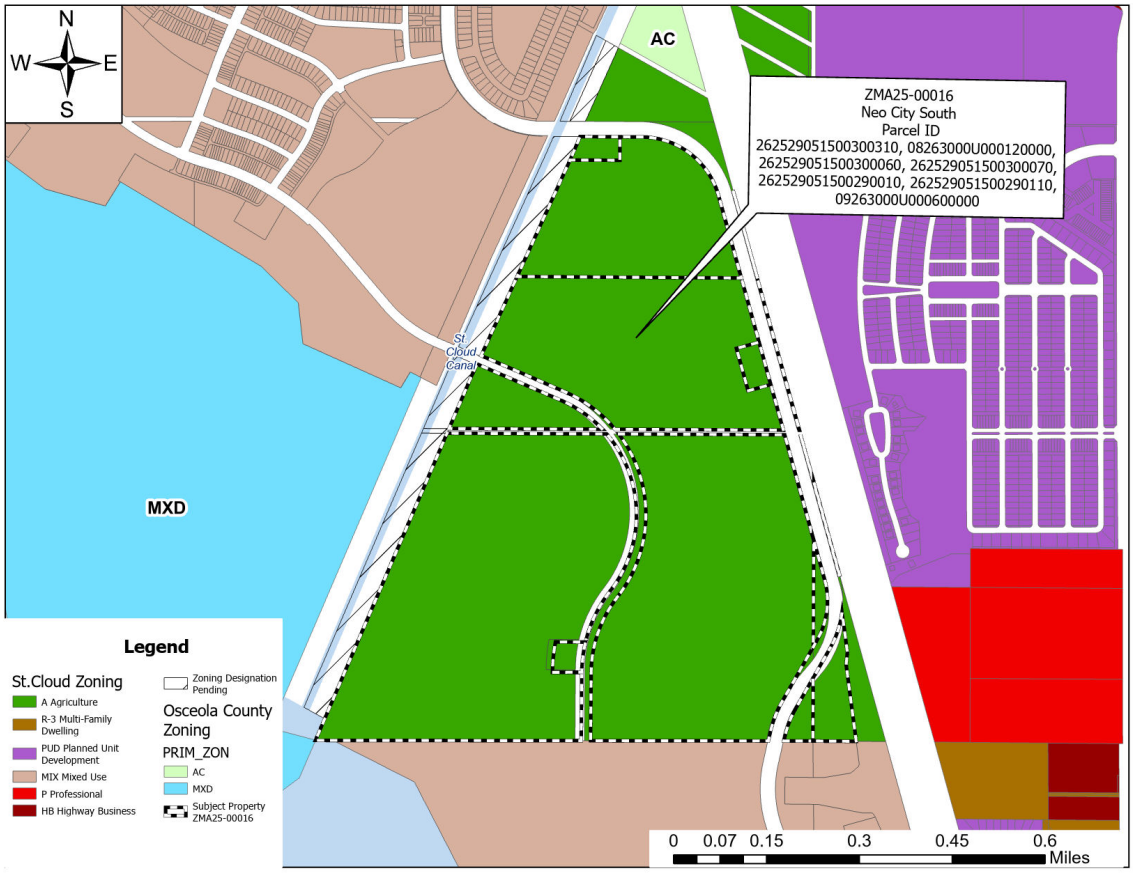


Figure 3 - Zoning Map

Public Notice

Notice of Public Hearing was mailed to property owners within 500 feet of the subject property and was advertised as required by State Statutes. No oral or written comments were received from the public at the time of this report's distribution. Additional public comment may be available at the public hearing.

Findings

Staff has reviewed the applicant's response to the 16 Required Findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant's responses follow the **bolded** LDC language, and staff's comments follow in *italics*:

1. **The proposed change is contrary to the established land use pattern;**

   "The proposed change is not contrary to the established land use pattern. The rezoning from Agriculture to Employment Commercial aligns with the City's vision for this area to support high-value employment uses. NeoCity South lies within a strategic growth corridor already transitioning from rural to urban employment and innovation-based development."

   The proposed change is consistent with the surrounding land use pattern and development. Currently, the parcel abuts Mixed Use zoning designations to the west and south.

2. **The proposed change would create an isolated district unrelated to the adjacent and nearby districts;**

   "The EC zoning will not create an isolated district. NeoCity South is adjacent to other planned urban districts, including the Cross Prairie and NeoCity employment areas. The rezoning supports a logical

extension of urban employment uses and advances integration with surrounding economic development initiatives."

The proposed change would not create an isolated district. Assigning a zoning designation of "EC" Employment Commercial is consistent with the adjacent districts and existing Future Land Use in the area. It is also consistent with the planned growth patterns being established in the Future Land Use Element of the Comprehensive Plan.

3. **The proposed change would materially alter the population density pattern and thereby increase or overtax the load on public facilities such as schools, utilities, streets, etc.;**

   "While the Employment Commercial (EC) zoning district permits residential density ranging from 10 to 40 dwelling units per acre, this rezoning is not intended for residential development. The property is being marketed exclusively for employment and job-generating uses. As such, there will be no increase in residential population or school enrollment. Infrastructure impacts will be limited to commercial and industrial demand and will be addressed through the City's concurrency review process at the time of development."

   The Future Land Use Designation of Employment being assigned through the Future Land Use Element update is compatible with the area and consistent with the requested Employment Commercial zoning district. The school capacity report has not been received at the time of this report.

4. **Existing district boundaries are illogically drawn in relation to existing conditions on the property proposed for change;**

   "The current Agricultural zoning no longer reflects the evolving context of the area. The property is adjacent to regional infrastructure and employment nodes, and the rezoning to EC provides a more logical zoning boundary that supports planned economic growth."

   District boundaries are not illogically drawn but are evolving pursuant to the needs of the City and the Comprehensive Plan, thus allowing for the consideration of this zoning map amendment.

5. **The proposed change would be contrary to the land use plan and would have an adverse effect on the comprehensive plan;**

   "The proposed EC zoning is consistent with the City's Comprehensive Plan, which identifies this area as a strategic location for employment diversification. The zoning change helps implement economic development policies without adverse effects on the surrounding land use framework."

   The proposed Zoning Map Amendment is consistent with the future land use designation of Employment and will not adversely impact the Comprehensive Plan.

6. **Change or changing conditions make the passage of the proposed amendment necessary;**

   "Significant regional investments in infrastructure (e.g., Cross Prairie Parkway, NeoCity, Turnpike access) have created changed conditions that necessitate an employment-supportive zoning district. The Agricultural zoning is outdated and incompatible with current planning efforts."

   The approved Mixed Use zoning designations to the west and south have changed the development and characteristics of the area, creating districts ranging in intensity of use. Additionally, the adoption of the Future Land Use Element changed the existing Medium Density Residential Future Land Use of the subject parcels to Employment. The existing Agricultural zoning is no longer compatible with this Future Land Use; therefore the Zoning Map Amendment is necessary.

7. **The proposed change will adversely influence living conditions in the neighborhood;**

   "The rezoning will not negatively affect living conditions. On the contrary, it will bring high-wage job opportunities, reduce commuter demand, and provide regional employment that complements nearby residential areas without introducing incompatible uses."

   The proposed change should not adversely influence living conditions in the neighborhood and are consistent with the development in the area.

8. **The proposed change will create or excessively increase traffic congestion or otherwise affect public safety;**

   "Future development will be reviewed through site plan and transportation impact analyses to mitigate traffic congestion. The site benefits from direct access to major corridors such as Cross Prairie Parkway and Florida's Turnpike, providing regional mobility and connectivity."

   The proposed Zoning Map Amendment is consistent with traffic patterns and should not excessively increase traffic congestion or negatively affect public safety, especially with planned direct access to the Florida's Turnpike. When new development is proposed, a Site Development Plan submittal would require a Traffic Impact Analysis to determine any new impact.

9. **The proposed change will create a drainage problem;**

   "The proposed zoning will not create a drainage issue. All development will be subject to permitting and stormwater review by the City of St. Cloud and the South Florida Water Management District, ensuring drainage compliance and protection of adjacent properties."

   Pursuant to Chapter 6 of the Land Development Code, stormwater management systems shall be provided for all areas of development and accommodate the runoff that flows into or across the development area without additional flooding of any other lands. Any proposed stormwater system will be reviewed during the Site Development Plan process.

10. **The proposed change will seriously reduce light or air to adjacent areas;**

    "The EC zoning allows non-residential uses that are not expected to significantly impact light or air to surrounding areas. Future development will comply with City standards for setbacks, height, and buffering."

    There is no development being proposed currently. When new development is proposed, a Site Development Plan submittal would address any possible impacts to light or air and determine the method of mitigation.

11. **The proposed change will adversely affect property values in the adjacent area;**

    "The proposed change is expected to enhance adjacent property values by increasing investment in public infrastructure, attracting quality employers, and supporting commercial growth within the region."

    The proposed Zoning Map Amendment should not adversely affect property values in the adjacent area.

12. **The proposed change will be a deterrent to the improvement or development of adjacent property in accordance with existing regulations;**

    "The rezoning supports development momentum in the area and will encourage adjacent properties to develop in alignment with the City's economic development strategies. It will serve as a catalyst, not a deterrent, for additional urban development."

The proposed Zoning Map Amendment is not expected to be a deterrent to the improvement or development of adjacent properties. Instead, the proposed designation would encourage the growth of the commercial and industrial industries that the City desires in accordance with their strategic plan goal of increasing the commercial tax base. This introduction of new industries may encourage further development in adjacent properties.

13. **The proposed change will constitute a grant of special privilege to an individual owner as contrasted with the public welfare;**

    "This rezoning is not a grant of special privilege but a strategic action to implement adopted economic development objectives. The EC zoning district promotes the public welfare through job creation, tax base expansion, and sustainable land use planning."

    The proposed Zoning Map Amendment does not grant special privilege to an individual owner, developer, or contrast with public welfare.

14. **There are substantial reasons why a reasonable use of property cannot be accomplished under existing zoning;**

    "The current Agricultural zoning does not permit the intensity, scale, or type of employment-oriented development envisioned for this area. Rezoning to EC is necessary to enable the site's highest and best use in accordance with the City's economic and land use policies."

    With the approval of the Employment Future Land Use designation, this Zoning Map Amendment is necessary to establish a compatible zoning district with the new designation. The existing Agricultural zoning is not compatible nor does it support the commercial growth the City desires in the Employment designations.

15. **Whether the change suggested is out of scale with the needs of the neighborhood of the city;**

    "The proposed EC zoning is not out of scale. The ±327-acre site is well-positioned to serve as a regional employment hub, and the district provides appropriate development controls to ensure compatibility and integration with City infrastructure and planning goals."

    The proposed Employment Commercial zoning district is consistent and compatible with the surrounding developments and the Employment future land use.

16. **It is impossible to find other adequate sites in the city for the proposed use in districts already zoned for such use.**

    "While other EC-zoned areas may exist, this site's strategic location adjacent to major transportation corridors, and regional infrastructure makes it uniquely suited for high-value employment development, making it a critical component of the City's long-term economic plan."

    Employment Commercial is a new zoning designation within the City which will support the Employment Future Land Use designation being established with the Future Land Use Element Comprehensive Plan Amendment (CPA24-00007/Ordinance 2024-50). No other parcels are currently zoned Employment Commercial, and this area is considered compatible with the new zoning designation. Approval of this request for a Zoning Map Amendment is not out of scope for the development in the area.

School Capacity Report

The Osceola County School District's School Capacity report states that "A more accurate report can be generated with the submittal of a detailed Site and Development Plan application which indicates the actual number of dwelling units proposed. The School District of Osceola County reserves its right to ensure proper mitigation of any impact on school capacity and the collection of Educational System Impact Fees."

Consistency With Strategic Plan Goals:

The proposed zoning map amendment meets the intent of the following City of St. Cloud Strategic Goals:

- ***High-Performing Government:*** *To focus on the continuity and sustainability of core public services; to become an employer of choice; and to be on the cutting-edge of technology.*

Staff Recommendation

Staff reviewed this request for a Zoning Map Amendment on or before September 29, 2025, with no objections. Therefore, staff recommends **APPROVAL** of the request for Zoning Map Amendment for Ordinance No. 2025-80, subject to the following condition:

PLANNING:

–The re-alignment of Cross Prairie Parkway and Southbury Drive and any related lot reconfigurations may be administratively approved by the City Manager or designee to expedite the review process for the construction of these framework roadways.

Planning Commission Requested Action

Per Section 1.3.3.B.2 of the Land Development Code, the Planning Commission shall review annexation, land use, and zoning petitions and submit its recommendations to the City Council based on the 16 required findings identified in Section 1.3.3.C.2.a of the Land Development Code.

On October 21, 2025, the Planning Commission – Motion to recommend approval with the conditions as stated by staff by Grigsby. Seconded by Douglas. Passed 5-0.

City Council Requested Action

The City Council shall review the recommendation from the Planning Commission and render a decision based on the recommendation and information presented. The Planning Commission recommendation is based on the 16 required findings of Section 3.4.3.C.2.a of the Land Development Code. The applicant responses to the 16 required findings have been provided as an attachment for the City Council's review.

On October 9, 2025 - Motion to approve the First Reading & Introduction by Paul. Seconded by Urban. Passed 4-0.

Attachments

- Ordinance No. 2025-80
- School Capacity Report

RETURN TO:
CITY OF ST. CLOUD
COMMUNTIY DEVELOPMENT DEPARTMENT
1300 9TH STREET
ST. CLOUD, FL 34769

ORDINANCE NO. 2025-80

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, PROVIDING FOR THE ZONING AMENDMENT OF THE ZONING MAP OF THE LAND DEVELOPMENT CODE OF THE CITY OF ST. CLOUD, FLORIDA, SPECIFICALLY CHANGING THE ZONING DESIGNATION OF APPROXIMATELY +/- 327.4 ACRES IDENTIFIED AS NEOCITY SOUTH, PROJECT #ZMA25-00016, FROM "A" AGRICULTURE TO "EC" EMPLOYMENT COMMERCIAL, GENERALLY LOCATED NORTH OF CLAY WHALEY ROAD, EAST OF C31 SAINT CLOUD CANAL, SOUTH OF CROSS PRAIRIE PARKWAY AND WEST OF FLORIDA'S TURNPIKE, PROVIDING FOR AMENDING THE OFFICIAL ZONING MAP, FILING OF THE PLANNING COMMISSION RECOMMENDATION AND PROOF OF PUBLICATION, APPLICABILITY AND EFFECT, SEVERABILITY, COPIES ON FILE AND EFFECTIVE DATE.

WHEREAS, zoning districts are required to be consistent with Comprehensive Plan of the City of St. Cloud; and,

WHEREAS, the proposed zoning is consistent with the proposed Future Land Use designation of "Employment"; and,

WHEREAS, the property described below is less than five percent (5%) of the total land area of the City of St. Cloud; and,

WHEREAS, the City Council has received the recommendation of the Planning Commission dated October 21, 2025; and,

WHEREAS, the City Council has held a Public Hearing on this matter after public notice has been provided, as required by law; and,

WHEREAS, it is in the best interest of the City of St. Cloud and its citizens that the proposed rezoning be approved.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of St. Cloud, Florida, as follows:

SECTION 1:

That Ordinance No. 87-HH of the City of St. Cloud, Florida, passed and adopted October 1, 1987, and any amendments to the ordinance, being the Land Development Code of the City of St. Cloud, Florida, is hereby amended to include and designate on the Official Zoning Map an "Employment

Commercial" zoning district classification for the property described below and as shown on Exhibit "A":

Legal Description:

PARCEL 1

A PARCEL OF LAND LYING IN SECTIONS 8 AND 9, TOWNSHIP 26 SOUTH, RANGE 30 EAST, OSCEOLA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS:

BEGINNING AT THE SOUTHEAST CORNER OF SAID SECTION 8; THENCE RUN N89°41'54"W ALONG THE SOUTH LINE OF SAID SECTION 8, A DISTANCE OF 246.44 FEET TO A POINT ON THE EAST LINE OF PARTIN WEST ROADWAY (CROSS PRAIRIE PARKWAY), AS DESCRIBED IN OFFICIAL RECORDS BOOK 3776, PAGE 619, OF THE PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA; THENCE RUN THE FOLLOWING THREE (3) COURSES ALONG SAID EAST LINE: RUN N12°39'43"E, A DISTANCE OF 46.68 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE TO THE EAST, HAVING A RADIUS OF 835.00 FEET AND A CENTRAL ANGLE OF 17°00'06"; THENCE RUN NORTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 247.77 FEET (CHORD BEARING = N21°09'45"E, CHORD = 246.87 FEET); THENCE RUN N29°39'48"E, A DISTANCE OF 597.21 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE TO THE WEST, HAVING A RADIUS OF 815.00 FEET AND A CENTRAL ANGLE OF 22°33'34"; THENCE RUN NORTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 320.90 FEET (CHORD BEARING = N18°23'01"E, CHORD = 318.83 FEET) TO A POINT ON A NON-TANGENT CURVE, CONCAVE TO THE WEST, HAVING A RADIUS OF 11,365.16 FEET AND A CENTRAL ANGLE OF 00°46'48"; THENCE DEPARTING SAID EAST LINE OF PARTIN WEST ROADWAY (CROSS PRAIRIE PARKWAY) RUN SOUTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 154.72 FEET (CHORD BEARING = S07°52'24"E, CHORD = 154.72 FEET); THENCE RUN S07°29'00"E, A DISTANCE OF 192.24 FEET; THENCE RUN S06°00'45"W, A DISTANCE OF 102.84 FEET; THENCE RUN S07°29'00"E, A DISTANCE OF 661.37 FEET TO A POINT ON THE SOUTH LINE OF SAID SECTION 9; THENCE RUN N89°29'16"W ALONG SAID SOUTH LINE, A DISTANCE OF 370.63 FEET TO THE POINT OF BEGINNING.

PARCEL 2

A PARCEL OF LAND LYING IN SECTIONS 8 AND 9, TOWNSHIP 26 SOUTH, RANGE 30 EAST, OSCEOLA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS:

COMMENCING AT THE SOUTHEAST CORNER OF SAID SECTION 8; THENCE RUN N89°41'54"W ALONG THE SOUTH LINE OF SAID SECTION 8, A DISTANCE OF 379.52 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE N89°41'54"W ALONG SAID SOUTH LINE, A DISTANCE OF 1,512.25 FEET TO A POINT ON THE EAST LINE OF

PARTIN WEST - ROAD B, AS DESCRIBED IN OFFICIAL RECORDS BOOK 3776, PAGE 619, OF THE PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA; THENCE RUN THE FOLLOWING FOUR (4) COURSES ALONG SAID EAST LINE: RUN N00°18'08"E, A DISTANCE OF 584.61 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE TO THE EAST, HAVING A RADIUS OF 1,060.00 FEET AND A CENTRAL ANGLE OF 37°31'04"; THENCE RUN NORTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 694.10 FEET (CHORD BEARING = N19°03'40"E, CHORD = 681.76 FEET) TO A POINT OF REVERSE CURVE CONCAVE TO THE WEST HAVING A RADIUS OF 1,140.00 FEET AND A CENTRAL ANGLE OF 104°36'51"; THENCE NORTHERLY ALONG THE ARC, A DISTANCE OF 2,081.48 FEET, (CHORD BEARING = N14°29'13"W, CHORD = 1,804.16 FEET); THENCE RUN N66°47'39"W, A DISTANCE OF 768.29 FEET TO A POINT ON THE EAST LINE OF CANAL C-31; THENCE RUN N24°25'03"E ALONG SAID EAST LINE, A DISTANCE OF 1,836.56 FEET TO THE SOUTHWEST CORNER OF POND SITE 1, AS DESCRIBED IN OFFICIAL RECORDS BOOK 3776, PAGE 619, OF THE PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA; THENCE RUN THE FOLLOWING TWO (2) COURSES ALONG THE PERIMETER OF SAID POND SITE 1: RUN S89°42'07"E, A DISTANCE OF 433.94 FEET; THENCE RUN N00°17'53"E, A DISTANCE OF 200.34 FEET TO A POINT ON THE SOUTHERLY LINE OF PARTIN WEST ROADWAY (CROSS PRAIRIE PARKWAY), AS DESCRIBED IN OFFICIAL RECORDS BOOK 3776, PAGE 619, OF THE PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA; THENCE RUN THE FOLLOWING THREE (3) COURSES ALONG SAID SOUTHERLY LINE: RUN S89°42'07"E, A DISTANCE OF 169.64 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE TO THE SOUTHWEST, HAVING A RADIUS OF 685.00 FEET AND A CENTRAL ANGLE OF 74°16'21"; THENCE RUN SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 887.97 FEET (CHORD BEARING = S52°33'56"E, CHORD = 827.09 FEET); THENCE RUN S15°25'46"E, A DISTANCE OF 1,296.15 FEET TO THE NORTHEAST CORNER OF POND SITE 2, AS DESCRIBED IN OFFICIAL RECORDS BOOK 3776, PAGE 619, OF THE PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA; THENCE RUN THE FOLLOWING THREE (3) COURSES ALONG THE PERIMETER OF SAID POND SITE 2: RUN S74°34'14"W, A DISTANCE OF 200.00 FEET; THENCE RUN S15°25'46"E, A DISTANCE OF 375.00 FEET; THENCE RUN N74°34'14"E, A DISTANCE OF 200.00 FEET TO A POINT ON THE EASTERLY LINE OF AFORESAID PARTIN WEST ROADWAY; THENCE RUN THE FOLLOWING FIVE (5) COURSES ALONG SAID EASTERLY LINE: RUN S15°25'46"E, A DISTANCE OF 1,724.88 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE TO THE WEST, HAVING A RADIUS OF 685.00 FEET AND A CENTRAL ANGLE OF 45°05'34"; THENCE RUN SOUTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 539.11 FEET (CHORD BEARING = S07°07'01"W, CHORD = 525.30 FEET); THENCE RUN S29°39'48"W, A DISTANCE OF 597.21 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE TO THE EAST, HAVING A RADIUS OF 965.00 FEET AND A CENTRAL ANGLE OF 17°00'06"; THENCE RUN SOUTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 286.35 FEET (CHORD BEARING = S21°09'45"W, CHORD = 285.30 FEET); THENCE ALONG A LINE NON-TANGENT TO SAID CURVE, S12°39'43"W, A DISTANCE OF 75.17 FEET TO THE POINT OF BEGINNING.

PARCEL 3

A PARCEL OF LAND LYING IN SECTION 8, TOWNSHIP 26 SOUTH, RANGE 30 EAST, OSCEOLA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS:

COMMENCING AT THE SOUTHEAST CORNER OF SAID SECTION 8; THENCE RUN N89°41'54"W ALONG THE SOUTH LINE OF SAID SECTION 8, A DISTANCE OF 1971.77 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE N89°41'54"W ALONG SAID SOUTH LINE, A DISTANCE OF 2,253.65 FEET TO A POINT ON THE EAST LINE OF CANAL C-31; THENCE RUN N23°13'41"E ALONG SAID EAST LINE, A DISTANCE OF 3,474.38 FEET TO A POINT ON THE WESTERLY LINE OF PARTIN WEST - ROAD B, AS DESCRIBED IN OFFICIAL RECORDS BOOK 3776, PAGE 619, OF THE PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA; THENCE RUN THE FOLLOWING THREE (3) COURSES ALONG SAID WESTERLY LINE: RUN S66°47'39"E, A DISTANCE OF 768.40 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE TO THE WEST, HAVING A RADIUS OF 1,060.00 FEET AND A CENTRAL ANGLE OF 104°36'51"; THENCE RUN SOUTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 1,935.41 FEET (CHORD BEARING = S14°29'13"E, CHORD = 1,677.55 FEET) TO A POINT OF REVERSE CURVE CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 1,140.00 FEET AND A CENTRAL ANGLE OF 24°27'36"; THENCE RUN SOUTHWESTERLY ALONG THE ARC, A DISTANCE OF 486.67 FEET, (CHORD BEARING = S25°35'25"W, CHORD = 482.99 FEET) TO THE NORTHEAST CORNER OF PARTIN WEST ROAD B POND SITE, AS DESCRIBED IN OFFICIAL RECORDS BOOK 3776, PAGE 619, OF THE PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA; THENCE RUN THE FOLLOWING FOUR (4) COURSES ALONG THE PERIMETER OF SAID PARTIN WEST ROAD B POND SITE: RUN N90°00'00"W, A DISTANCE OF 255.66 FEET TO A POINT ON A NON-TANGENT CURVE, CONCAVE TO THE EAST, HAVING A RADIUS OF 1,390.00 FEET AND A CENTRAL ANGLE OF 10°37'20"; THENCE RUN SOUTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 257.69 FEET (CHORD BEARING = S05°36'48"W, CHORD = 257.32 FEET); THENCE RUN S00°18'08"W, A DISTANCE OF 4.12 FEET; THENCE RUN S89°41'52"E, A DISTANCE OF 250.00 FEET TO A POINT ON AFORESAID WESTERLY LINE OF PARTIN WEST - ROAD B; THENCE RUN S00°18'08"W ALONG SAID WESTERLY LINE, A DISTANCE OF 580.50 FEET TO THE POINT OF BEGINNING.

PARCEL 4

A PARCEL OF LAND LYING IN SECTIONS 8 AND 9, TOWNSHIP 26 SOUTH, RANGE 30 EAST, OSCEOLA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS:

COMMENCING AT THE SOUTHEAST CORNER OF SAID SECTION 8; THENCE RUN N89°41'54"W ALONG THE SOUTH LINE OF SAID SECTION 8, A DISTANCE OF 246.44 FEET TO A POINT ON THE EAST LINE OF PARTIN WEST ROADWAY (CROSS PRAIRIE PARKWAY), AS DESCRIBED IN OFFICIAL RECORDS BOOK 3776, PAGE 619, OF THE PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA; THENCE RUN THE

FOLLOWING FOUR (4) COURSES ALONG SAID EAST LINE: RUN N12°39'43"E, A DISTANCE OF 46.68 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE TO THE EAST, HAVING A RADIUS OF 835.00 FEET AND A CENTRAL ANGLE OF 17°00'06"; THENCE RUN NORTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 247.77 FEET (CHORD BEARING = N21°09'45"E, CHORD = 246.87 FEET); THENCE RUN N29°39'48"E, A DISTANCE OF 597.21 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE TO THE WEST, HAVING A RADIUS OF 815.00 FEET AND A CENTRAL ANGLE OF 45°05'34"; THENCE RUN NORTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 641.42 FEET (CHORD BEARING = N07°07'01"E, CHORD = 624.99 FEET) TO THE END OF THE CURVE, SAID POINT BEING THE POINT OF BEGINNING; THENCE CONTINUE ALONG SAID EAST LINE OF PARTIN WEST ROADWAY (CROSS PRAIRIE PARKWAY) N15°25'46"W, A DISTANCE OF 3,396.03 FEET; THENCE DEPARTING SAID EAST LINE RUN N74°31'32"E, A DISTANCE OF 0.66 FEET TO A POINT ON THE WEST RIGHT OF WAY LINE OF FLORIDA'S TURNPIKE; THENCE RUN S15°28'28"E ALONG SAID WEST LINE, A DISTANCE OF 3,396.03 FEET; THENCE DEPARTING SAID WEST LINE RUN S74°31'32"W, A DISTANCE OF 3.33 FEET TO THE POINT OF BEGINNING. Containing +/- 0.118 acres, more or less.

SECTION 2:

The property is rezoned to "EC" Employment Commercial, making applicable all provisions of the Land Development Code of the City of St. Cloud, Florida.

SECTION 3:

The City Manager or his/her designee is authorized and directed to promptly enter such change on the Official Zoning Map.

SECTION 4:

Upon adoption of this ordinance, the Planning Commission recommendation and "Proof of Publication" of the required Public Hearing notices shall be filed in the Community Development Department.

SECTION 5:

If any section or portion of a section of this ordinance proves to be invalid, unlawful or unconstitutional, it shall not be held to impair the validity, force or effect of any other section or part of this ordinance.

SECTION 6:

The City Clerk, after consultation with the City Attorney, is authorized to correct scrivener's errors found by filing a corrected copy of this ordinance in the official records of the City.

SECTION 7:

Effective Date. This ordinance has been published and shall take effect as provided by law.

First Reading on the 9th day of October, 2025.

Final Reading on the 13th day of November, 2025.

CITY OF ST. CLOUD

_____

Christian B. Robertson, Mayor

ATTEST:

_____

Ivy Llauro, City Clerk

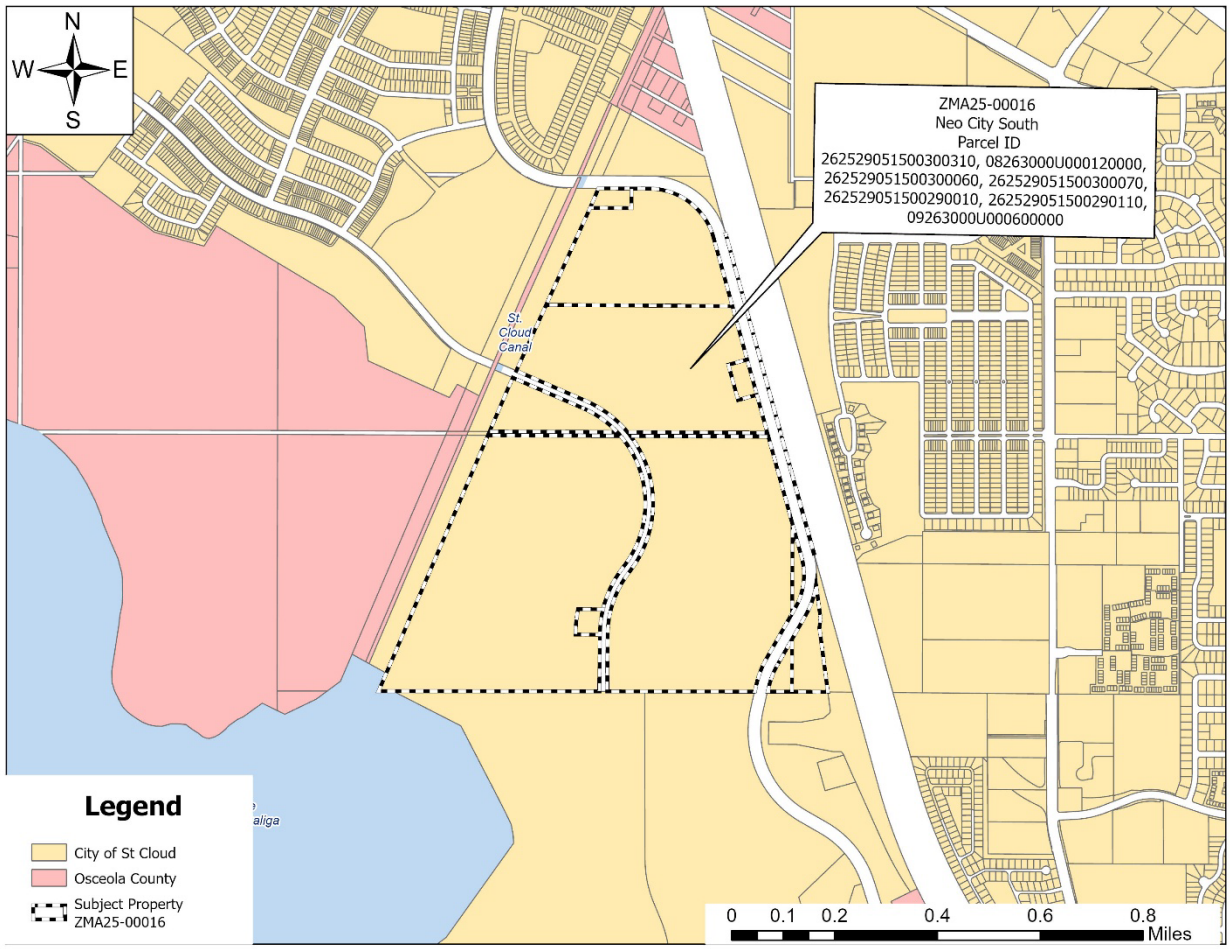
LEGAL IN FORM AND VALID IF ADOPTED:
de Beaubien, Simmons, Knight, Mantzaris & Neal, LLP

_____

Daniel F. Mantzaris, City Attorney

Pursuant to Section 695.26 (3) (f), this instrument exempt from Chapter 695, F.S.: Prepared by and return to a Public Official: City Manager, City of St. Cloud; 1300 9th Street; St. Cloud, Florida 34769

EXHIBIT "A"



PARCEL ID NO(S).

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262529051500300060
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262529051500290010
262529051500290110
09263000U000600000

THE SCHOOL DISTRICT OF OSCEOLA COUNTY, FLORIDA
PLANNING SERVICES DEPARTMENT
SCHOOL CAPACITY REPORT

SDOC#: 2025/26-0042

DRC#: ZMA25-00016

Current FLU: MDR
Requested FLU: EC

PROJECT NAME: NeoCity South

Current Zoning: A
Requested Zoning: ECC

PROJECT LOCATION: 0 Crossprairie Pkwy., St. Cloud, 34772

COMMENTS DUE DATE: 10.6.25

PID: 09-26-30-00U0-0060-0000
26-25-29-0515-0029-0010
26-25-29-0515-0029-0110
26-25-29-0515-0030-0060
26-25-29-0515-0030-0070
26-25-29-0515-0030-0310
08-26-30-00U0-0012-0000

A more accurate report can be generated with the submittal of a detailed Site and Development Plan application which indicates the actual number of dwelling units proposed. The School District of Osceola County reserves its right to ensure proper mitigation of any impact on school capacity and the collection of Educational System Impact Fees.

Meeting: November 13, 2025

Agenda Item Type: Public Hearings
Resolution 2025-139R DMI Business Park CNU

Community Development Agenda Item:
PUBLIC HEARING FOR RESOLUTION NO. 2025-139R, a resolution of the City Council of the City of St. Cloud, Florida, granting a Conditional Use for a "Church" in the "I-1 " Industrial Zoning District on the +/- 1.47 acres of land known as DMI Business Park, Project #CNU25-00005, located at 400 DMI Court, as described in the body of this resolution. (Above is full title) **ACTION ON RESOLUTION NO. 2025-139R**

Strategic Key Focus Areas:
High-Performing Government

Background Information:
The subject property is located at 400 DMI Court, St. Cloud, FL 34771. The subject property has a Future Land Use designation of Employment and is located within the “I-1” Industrial Zoning District.

The applicant intends to use the subject property as a place of worship that would host a maximum of 30 members within one building for weekly Wednesday night and Sunday morning / afternoon services. Wednesday night bible study will begin at 7:00pm, and the Sunday services will be held at 10:00am and 12:00pm.

Legal Authority:
Section 1.3.3.3.c. of the Land Development Code states that before any conditional use is granted, the City Council shall make a finding, based upon the consideration of the factual matters stated as questions, that the granting of the conditional use will not adversely affect the public interest, but rather will promote the public health, safety, and general welfare. Such finding shall be made if all of the factual matters, stated as questions, are answered in the affirmative, but if not, the conditional use application shall be denied.

Budget and Recommendation:
There is no cost associated with this item.

On October 21, 2025, the Planning Commission – Motion to recommend approval by Douglas. Seconded by Grigsby. Passed 5-0,

Staff has reviewed this request for a Conditional Use on or before September 29, 2025, and recommends **APPROVAL WITH CONDITIONS** of the request of a Conditional Use for “Church” in the “I-1” Industrial Zoning District Zoning District:

1. The approval of the requested Conditional Use does not constitute the approval of the

provided concept plan. Changes to the site will require approval of a Site Development Plan and any additional approvals required by the Land Development Code
2. No reduction in parking shall be permitted.
3. This approval is for this “Place of Worship”, The Upper Room Sanctuary Church, only. Upon this church leaving the subject property, the conditional use shall expire.
4. Prior to Conditional Use approval, a legally binding and recorded parking agreement shall be executed by the property owner of DMI Business Park Phase 1. This agreement shall clearly define the allocation, location, timeframe and use of parking spaces that will be utilized by the business of the proposed Conditional Use.
5. For as long as the use permitted here under continues, in the event that stacking or standing of vehicles encroaches into the public right-of-way or otherwise interferes with flow of vehicular traffic as determined by the City, the Resolution may be brought back before the City Council for review and consideration of additional conditions to address traffic issues or possible revocation of the rights granted hereunder in perpetuity.

Finance Director's Comments:
N/A

Procurement Director's Comments:
N/A

City Manager's Comments:
City Manager recommends approval

City Council Action:
11/13/25 - Final Action

Attachments:
1. 1 CNU25-00005 DMI BUSINESS PARK STAFF REPORT CC 11.13.25
2. 2 CNU25-00005 DMI BUSINESS PARK RESOLUTION NO. 2025-0139R CC 11.13.25
3. CNU25-00005 SITE PLAN

City Council Staff Report
Meeting Date: November 13, 2025

DRC Case No.
CNU25-00005

Resolution No.
2025-139R

Type of Application
Conditional Use

Case Name
DMI Business Park

Applicant/Agent
Steve Moser

Address/Location
400 DMI Court
St. Cloud, FL 34769

Parcel ID No.
12-26-30-0725-0001-0180

Total Land Area
+/- 1.47 acres

Project Planner
Ralph Keith
Associate Planner

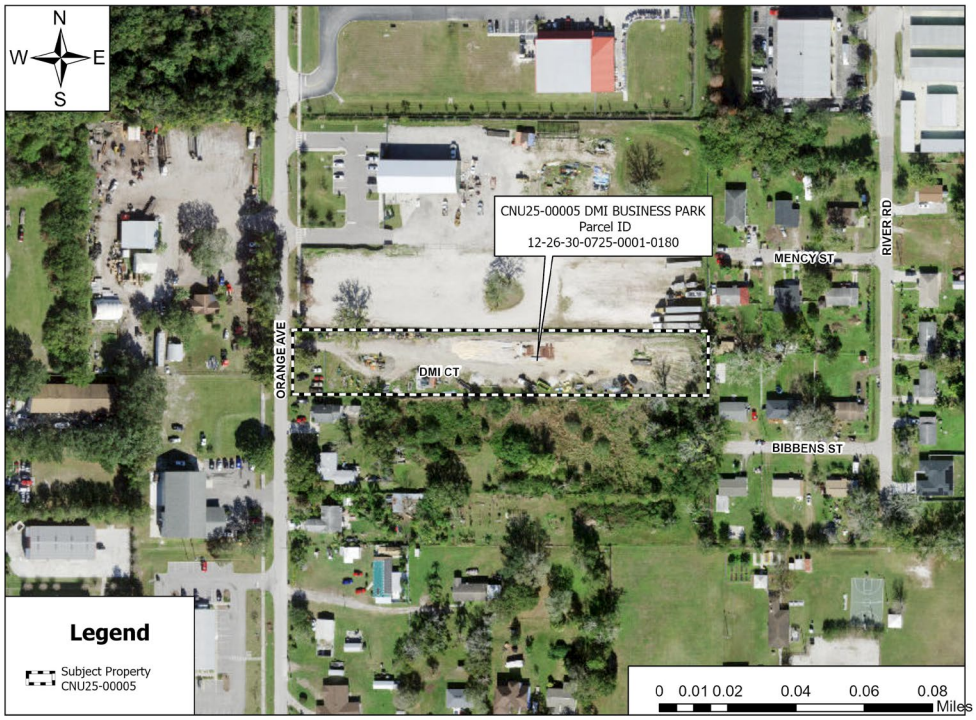


Figure 1 – Aerial Map

Request
The applicant is requesting approval of a Conditional Use for a "Place of Worship" known as The Upper Room Sanctuary in the "I-1" Industrial Zoning District, as shown in **Figure 1** above.

Background
The subject property is located at 400 DMI Court, St. Cloud, FL 34771. The subject property has a Future Land Use designation of Employment and is located within the "I-1" Industrial Zoning District.

The applicant intends to use the subject property as a place of worship that would host a maximum of 30 members within one building for weekly Wednesday night and Sunday morning / afternoon services. Wednesday night bible study will begin at 7:00pm, and the Sunday services will be held at 10:00am and 12:00pm.

As required by the Land Development Code Section 1.3.3.3.b, the applicant has provided responses to the six factual matters listed therein. The proposed Conditional Use is consistent with the general pattern of development in the area and should not have adverse impacts on existing traffic patterns or intensities.

The following table summarizes adjacent Future Land Use designations, Zoning districts, and existing uses.

TABLE 1: ZONING & FUTURE LAND USE OF NEIGHBORING PROPERTIES			
Direction	***Zoning***	***Future Land Use***	***Existing Land Use***
North	"I-2" Industrial	Industrial	Vacant Industrial
East	"R-1A" Single Family Dwelling	Low Density Residential	Single-Family – Improved
West	"I-2A" Industrial	Industrial	Warehouse General
South	"I-1" Industrial	Industrial	Vacant Industrial

Figures 2 and 3 depict the current Future Land Use designations and Zoning Districts.

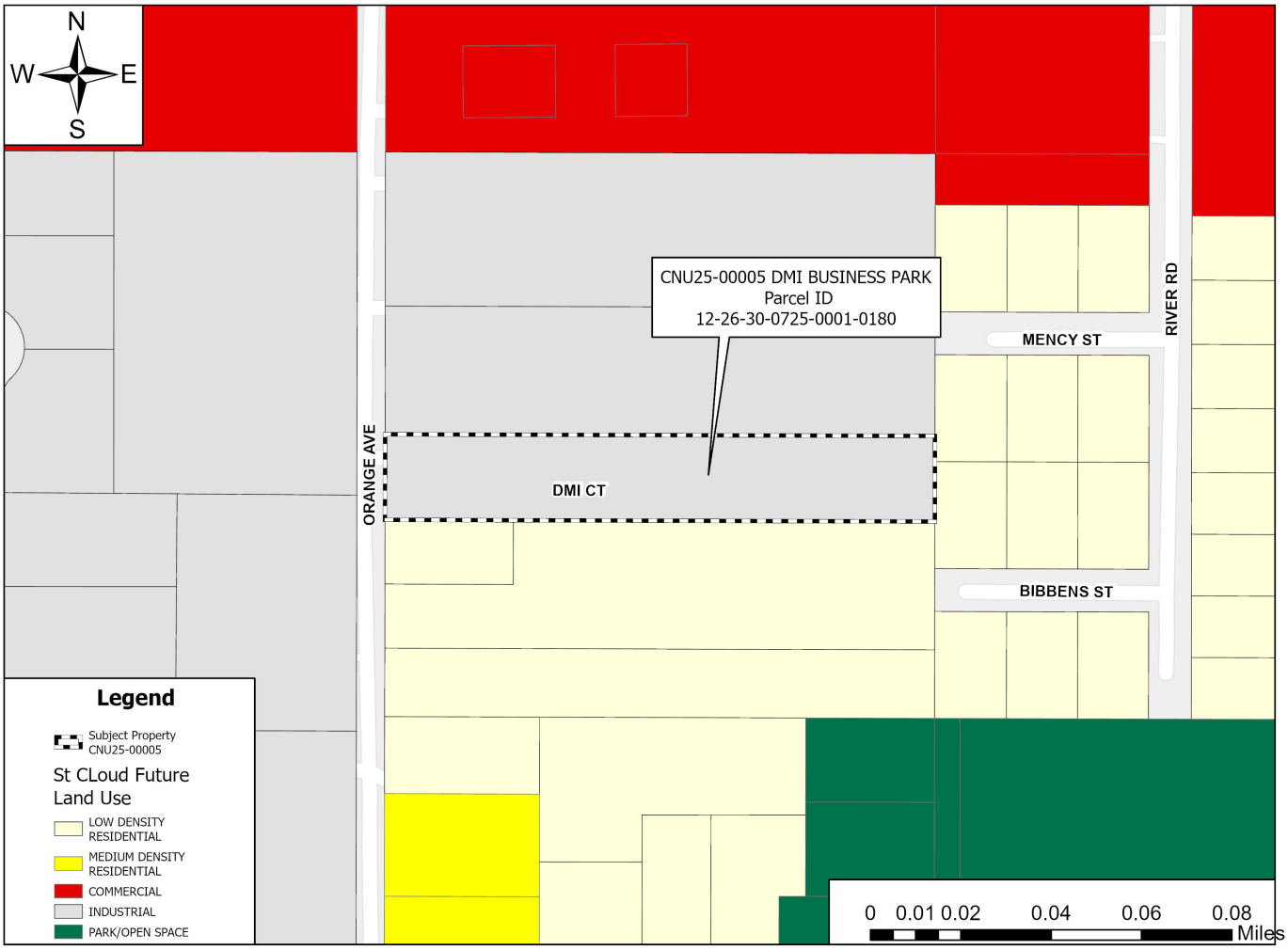


Figure 2 – Future Land Use Map

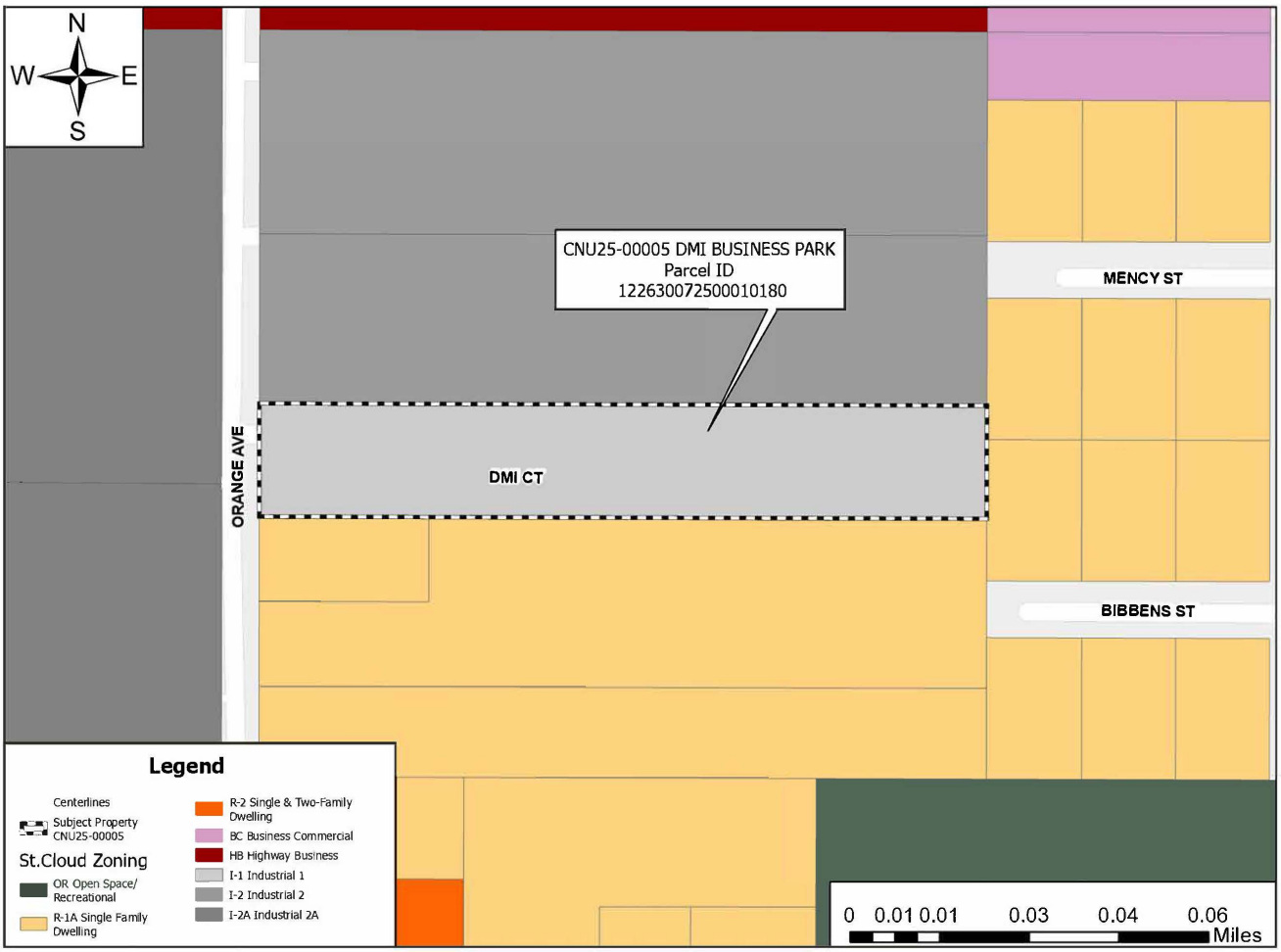


Figure 3 – Zoning Map

Public Notice

Notice of Public Hearing was mailed to property owners within 500 feet of the subject property and was advertised as required by State Statutes. Oral comments were received from the public, regarding the proposed installation of a fence on the northwest side of the property to restrict access during dismissal at the time of this report's distribution. Additional public comments may be presented at the public hearing.

Findings

Staff has reviewed the applicant's response to the factual matters of Section 1.3.3.C.3.b of the Land Development Code. The applicant's responses follow the **bolded** LDC language, and staff's comments follow in *italics*:

1. **Is the conditional use consistent with the general pattern of the land development within the zoning district.**

   "The proposed church will be located in an existing industrial style building whose scale, materials, and site layout are consistent with surrounding properties in the district. Industrial zoning in this area accommodates large structures with ample off-street parking and vehicular access, which align with the physical requirements of a place of worship. Similar assembly uses exist within or near the district, establishing a precedent for community-oriented facilities alongside industrial uses. The church will primarily operate on weekends and evenings, minimizing any conflicts with weekday

industrial operations."

The proposed Conditional Use is consistent with the general pattern of land development within the zoning district. Per section, 3.7.1.A of the Land Development Code, "I-1" is intended to provide for development which allows for office, research, technology application, warehousing and light industrial uses. Places of Worships are considered Conditional Uses as they do not typically meet those characteristics but could still be supported in this type of development, if approved.

2. **How is the conditional use consistent with the trends of development in the area or neighborhood, as opposed to being detrimental to the area or neighborhood.**

"The Comprehensive Plan encourages diverse, balanced land uses that meet the social, cultural, and spiritual needs of residents. Places of worship contribute to community cohesion and quality of life, which aligns with the Plan's goals for fostering vibrant, inclusive neighborhoods. The proposed church supports the City's vision by providing a community-serving use within an existing building, thereby promoting adaptive reuse and reducing the need for new land development."

The proposed Conditional Use is consistent with the trends of development within the area as it fulfills a public service to the immediate and adjacent areas. The parcels to the west and north of the subject property house commercial uses, while the parcels to the east are single-family dwellings. This particular use would diversify the services within the immediate area and allow the residents to have access to different uses within proximity to their neighborhoods.

3. **How is the conditional use consistent with the patterns of development intensity in the area or neighborhood?**

"The site is surrounded by other industrial and commercial operations, most of which have limited weekend or evening activity. This ensures compatibility, as the church's peak usage will occur during non-peak business hours, reducing potential noise, traffic, or parking conflicts. The building's design, lighting, and landscaping will be maintained to meet City standards, ensuring the property remains visually harmonious with neighboring parcels."

The proposed Conditional Use is consistent with the patterns of development intensity in the area. The church's peak usage will occur on Sundays between 10:00 a.m. and 12:00 p.m., outside of traditional business hours. This scheduling minimizes the potential for noise, traffic, or parking conflicts during the regular work week. Additionally, the applicant has advised that the maximum number of attendees would be 30 attendees during these peak times. This could be less intense than other permitted uses within this district.

4. **How does the conditional use have reasonable effect on existing traffic patterns, movements, and intensities without adverse impacts.**

"Traffic impacts will be minimal, as services and events are primarily scheduled outside typical weekday business hours. The site provides sufficient on-site parking in compliance with City requirements, with convenient ingress and egress from DMI Court. The existing transportation infrastructure can adequately accommodate projected trip generation without causing undue congestion or delay."

The proposed Conditional Use should have a minimal impact on existing traffic patterns, as the property abuts Orange Avenue and is set back from the main roadway, providing adequate access and circulation for the proposed use. It is not anticipated that the site will exceed maximum trips for the use, however a Traffic Impact Analysis is not required at this level of review.

5. **Is the conditional use consistent with the City's Comprehensive Plan?**

"The church will enhance the district by repurposing an existing industrial building for a stable, well-maintained community use. Its presence can have a positive effect on surrounding property values by promoting consistent upkeep and attracting visitors who may also patronize nearby businesses. The

use will not displace active industrial operations but will instead complement them by activating the area during otherwise low-traffic periods."

The proposed Conditional Use is consistent with the City's Comprehensive Plan. The church will repurpose an existing industrial building for stable, well-maintained community use that supports the Comprehensive Plan's goals for infill and adaptive reuse of existing structures. The proposed use complements surrounding industrial and commercial activities by activating the area during low-traffic periods, without displacing active operations. Additionally, the continued maintenance and community presence are expected to have a positive influence on the character and appearance of the surrounding area.

6. **Can the conditional use development be designed to function effectively for its intended purpose without creating negative off-site impacts for adjoining parcels?**

   "Potential concerns, such as traffic congestion or noise, are mitigated by scheduling primary activities outside of normal business hours, providing adequate on-site parking, and maintaining a well-kept property appearance. All lighting will be downcast and shielded to prevent light spillover, and outdoor activities will be limited in duration and frequency to avoid disruption to neighboring uses."

   The proposed Conditional Use is designed to function effectively for its intended purpose without creating negative off-site impacts on adjoining parcels. The operational hours are limited to scheduled services, and the property includes on-site parking and maintained facilities, making off-site impacts minimal.

Consistency With Strategic Plan Goals

The proposed Conditional Use request meets the intent of the following goals of the City of St. Cloud Strategic Plan:

- ***High-Performing Government:*** To focus on the continuity and sustainability of core public services.

Staff Recommendations

Staff has reviewed this request for a Conditional Use on or before September 29, 2025, and recommends **APPROVAL WITH CONDITIONS** of the request of a Conditional Use for "Church" in the "I-1" Industrial Zoning District Zoning District:

1. The approval of the requested Conditional Use does not constitute the approval of the provided concept plan. Changes to the site will require approval of a Site Development Plan and any additional approvals required by the Land Development Code
2. No reduction in parking shall be permitted.
3. This approval is for this "Place of Worship", The Upper Room Sanctuary Church, only. Upon this church leaving the subject property, the conditional use shall expire.
4. Prior to Conditional Use approval, a legally binding and recorded parking agreement shall be executed by the property owner of DMI Business Park Phase 1. This agreement shall clearly define the allocation, location, timeframe and use of parking spaces that will be utilized by the business of the proposed Conditional Use.
5. For as long as the use permitted here under continues, in the event that stacking or standing of vehicles encroaches into the public right-of-way or otherwise interferes with flow of vehicular traffic as determined by the City, the Resolution may be brought back before the City Council for review and consideration of additional conditions to address traffic issues or possible revocation of the rights granted hereunder in perpetuity.

Planning Commission Requested Action

Section 1.3.3.3.B.3 of the Land Development Code states that the Planning Commission is empowered to hear all conditional uses specifically provided for in these zoning regulations; to decide such questions as are involved in recommending whether or not conditional uses should be granted; and to recommend to City Council whether conditional uses with such conditions and safeguards are reasonable and appropriate under these zoning regulations.

The Planning Commission shall consider these factual matters in regard to urban planning and traffic standards, methods and techniques, when making their recommendation to the City Council.

On October 21, 2025, the Planning Commission – Motion to recommend approval by Douglas. Seconded by Grigsby. Passed 5-0

Attachments

- Resolution No. 2025-139R
- Conceptual Plan

RESOLUTION NO. 2025-139R

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, GRANTING A CONDITIONAL USE FOR A "CHURCH" IN THE "I-1 " INDUSTRIAL ZONING DISTRICT ON THE +/- 1.47 ACRES OF LAND KNOWN AS DMI BUSINESS PARK, PROJECT #CNU25-00005, LOCATED AT 400 DMI COURT, AS DESCRIBED IN THE BODY OF THIS RESOLUTION.

WHEREAS, the applicant has made application for a Conditional Use for a "Place of Worship" and has been assigned DRC# CNU25-00005; and

WHEREAS, the Planning Commission held a public hearing on this request on October 21, 2025, at which it made a recommendation of CONDITIONAL APPROVAL; and

WHEREAS, the City Council held a public hearing on this request on November 13, 2025, and determined that the request for a Conditional Use satisfies the six criteria for granting Conditional Use required by Section 1.3.3.b of the Land Development Code.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF ST. CLOUD, FLORIDA, as follows:

SECTION 1.
The subject property to which this Conditional Use is applicable is shown in Exhibit A and more specifically described below:

PARCEL ID: 12-26-30-0725-0001-0180

LEGAL DESCRIPTION:

THE NORTH 100.0 FEET OF LOT 18, THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION OF SECTION 12, TOWNSHIP 26 SOUTH, RANGE 30 EAST, ACCORDING TO THE OFFICIAL PLAT THEREOF, AS RECORDED IN PLAT BOOK B, PAGE3, OF THE PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA.

TOGETHER WITH:

All lying and being in Osceola County, Florida.

CONTAINING +/- 1.47 ACRES, MORE OR LESS.

SECTION 2.
The Conditional Use is for a "Church" in the Industrial "I-1" Zoning District as shown conceptually in Exhibit B.

SECTION 3.

The City Council has determined that the granting of Conditional Use will not adversely affect the public interest, but rather will promote the health, safety, and general welfare. This determination is based upon, but not limited to, consideration of the following factual matters in Section 1.3.3.3.b of the Land Development Code:

1. Is the conditional use consistent with the general pattern of land development within the zoning district?
2. Is the conditional use consistent with the trends of development in the area or neighborhood, as opposed to being detrimental to the area or neighborhood?
3. Is the conditional use consistent with the patterns of development intensity in the area or neighborhood?
4. Does the conditional use have reasonable effect on existing traffic patterns, movements and intensities without adverse impacts?
5. Is the conditional use consistent with the City's Comprehensive Plan?
6. Can the conditional use development be designed to function effectively for its intended purpose without creating negative off-site impacts for adjoining parcels?

SECTION 4.

The following Conditions must be adhered to and will continually remain applicable on the approved property.

1. 1. The approval of the requested Conditional Use does not constitute the approval of the provided concept plan. Changes to the site will require approval of a Site Development Plan and any additional approvals required by the Land Development Code
2. No reduction in parking shall be permitted.
3. This approval is for this “Church”, The Upper Room Sanctuary Church, only. Upon this church leaving the subject property, the conditional use shall expire.
4. Prior to Conditional Use approval, a legally binding and recorded parking agreement shall be executed by the property owner of DMI Business Park Phase 1. This agreement shall clearly define the allocation, location, timeframe and use of parking spaces that will be utilized by the business of the proposed Conditional Use.
5. For as long as the use permitted here under continues, in the event that stacking or standing of vehicles encroaches into the public right-of-way or otherwise interferes with flow of vehicular traffic as determined by the City, the Resolution may be brought back before the City Council for review and consideration of additional conditions to address traffic issues or possible revocation of the rights granted hereunder in perpetuity.

SECTION 5.

The Conditional Use granted by this resolution shall expire twelve (12) months after the effective date of such action by the City Council unless any required local business tax receipt or building permit based upon and incorporating the Conditional Use is obtained within one year of the approval date of this resolution.

SECTION 6.

This resolution shall take effect immediately upon its adoption by the City of St. Cloud, Florida.

ADOPTED this 13th day of November 2025

CITY OF ST. CLOUD

_____
Christian B. Robertson, Mayor

ATTEST:

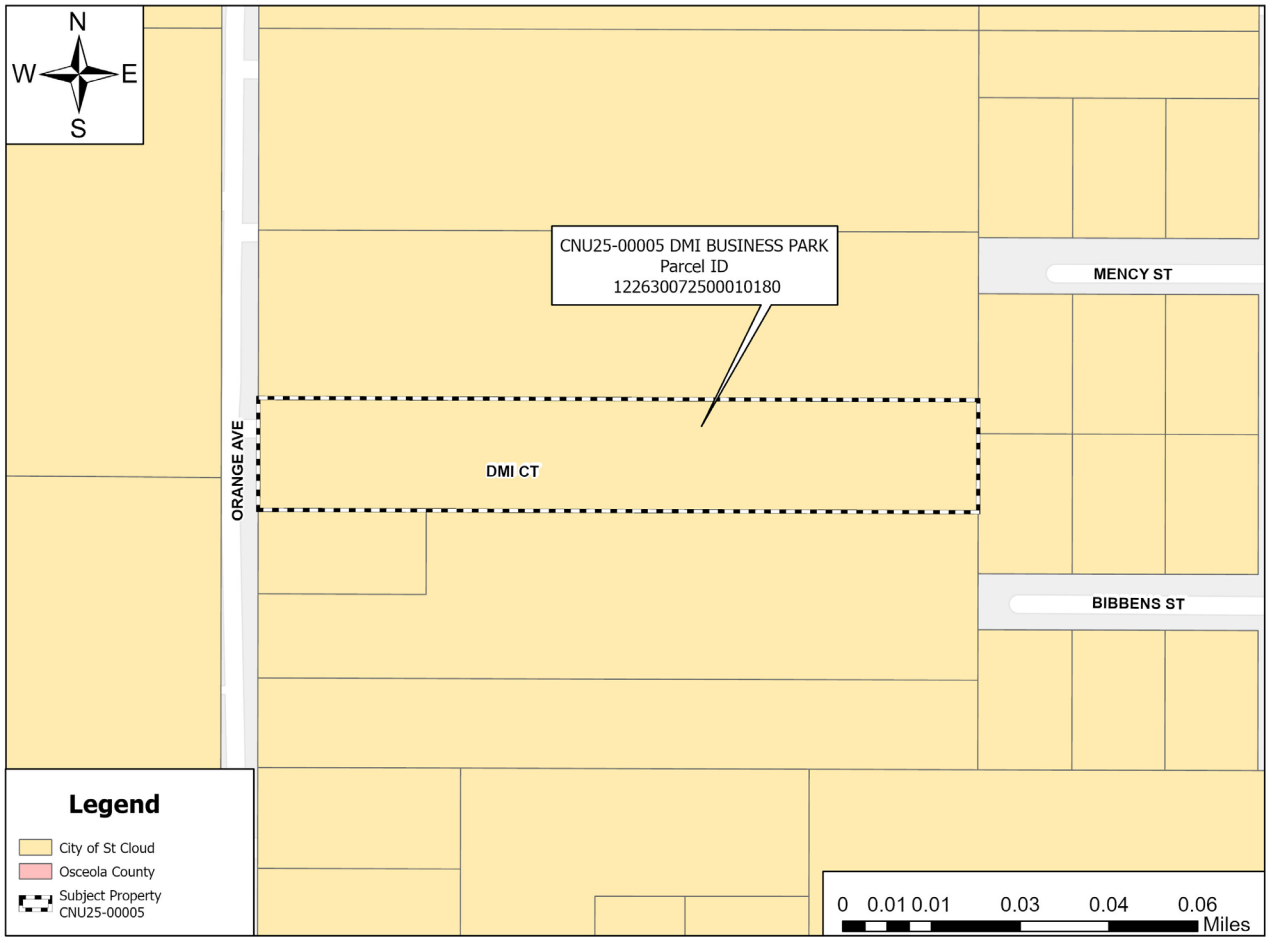
_____
Ivy Llauro, City Clerk

LEGAL IN FORM AND VALID IF ADOPTED:
de Beaubien, Simmons, Knight, Mantzaris & Neal, LLP

_____
Daniel F. Mantzaris, City Attorney

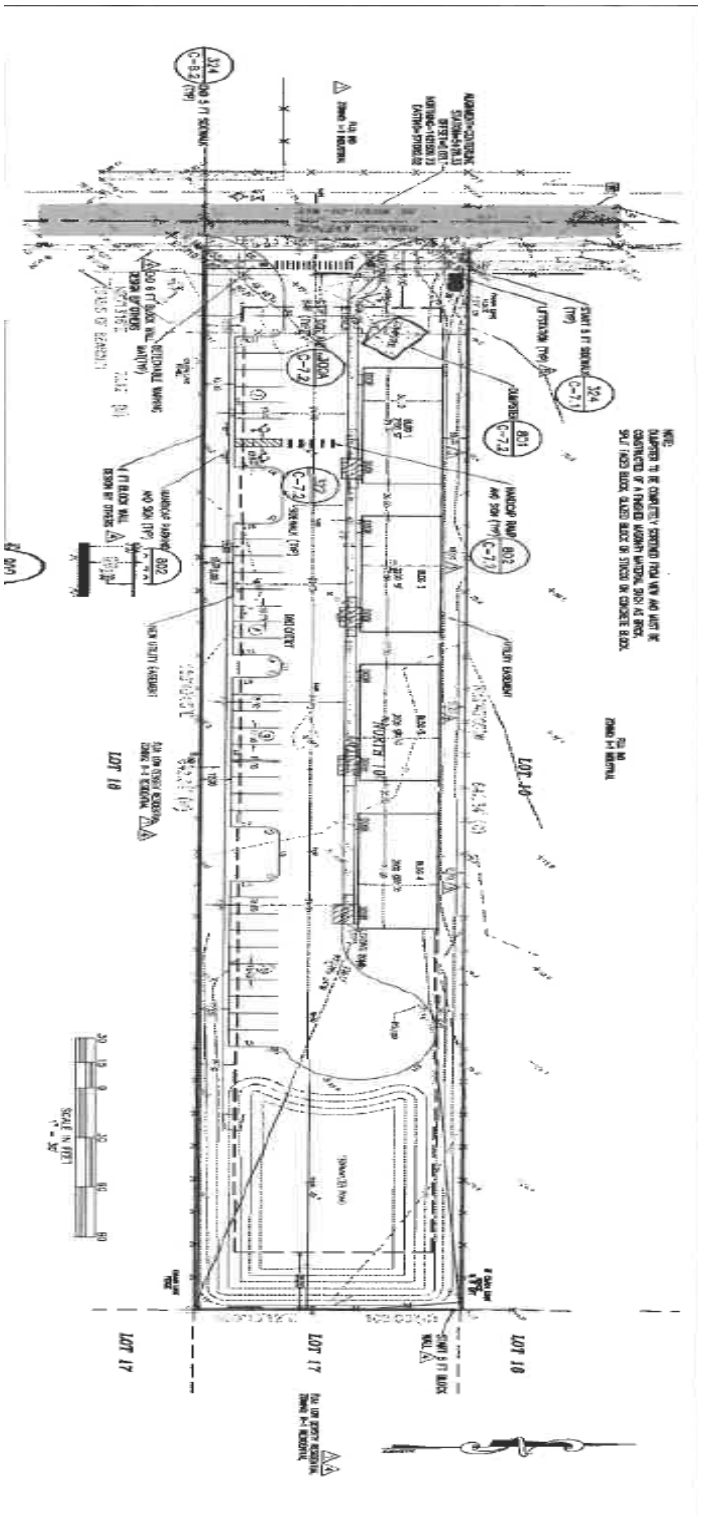
Pursuant to Section 695.26 (3) (f), this instrument exempt from Chapter 695, F.S.

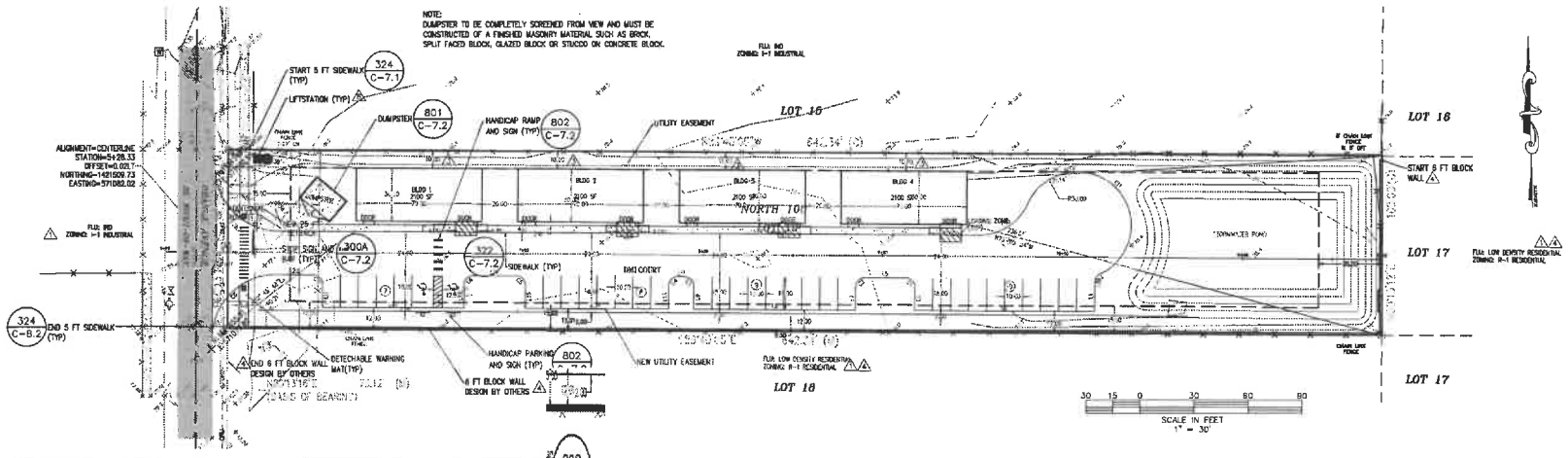
Exhibit "A"



PID: 12-26-30-0725-0001-0180

Exhibit "B"





Line Table		
Line #	Length	Direction
L1	16.26	S0° 17' 33.35"W
L2	100.16	N89° 38' 36.99"W
L3	12.95	N1° 02' 45.88"E
L5	23.01	N89° 39' 39.13"W
L7	13.07	S0° 19' 49.83"W
L8	89.98	N89° 40' 31.65"W
L9	13.00	N0° 19' 54.97"E
L11	4.00	N89° 40' 64.75"W
L13	13.00	S0° 19' 51.06"W
L14	80.01	N89° 40' 31.65"W
L15	12.87	N0° 19' 55.25"E
L17	23.98	N89° 40' 64.75"W
L19	12.88	S0° 19' 55.25"W
L20	79.00	N89° 40' 31.65"W
L21	12.89	N0° 19' 55.25"E
L23	21.49	N89° 40' 64.75"W
L25	38.53	N0° 35' 57.49"E
L26	3.12	N32° 35' 26.91"E
L27	1.64	N14° 49' 56.78"E
L28	50.07	N0° 38' 27.20"W
L30	389.95	S89° 40' 31.65"E
L34	0.00	N0° 17' 33.41"E

Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C12	5.68	5.00	65.11	S32° 45' 04"W	5.38
C11	115.89	30.00	221.33	S45° 25' 13"E	56.14
C10	34.78	30.00	66.42	N57° 07' 30"E	32.86
C9	53.90	35.37	87.31	S45° 45' 54"E	48.84
C8	54.53	35.75	87.41	S45° 27' 11"W	49.40
C7	7.85	5.00	90.00	N44° 40' 05"W	7.07
C6	7.85	5.00	90.00	S45° 19' 55"W	7.07
C5	7.85	5.00	90.00	N44° 40' 05"W	7.07
C4	7.85	5.00	90.00	S45° 19' 55"W	7.07
C3	7.85	5.00	90.00	N44° 40' 05"W	7.07
C2	7.86	5.00	89.31	S45° 40' 48"W	7.03
C1	7.85	5.00	89.69	N44° 39' 52"W	7.07

DMI BUSINESS PARK
ORANGE AVENUE
ST CLOUD, FLORIDA 34771

SITE PLAN

NO.	DATE	REVISION / ITEM NOTE
1	06/02/2023	REVISED PER SJ DRWD COMMENTS
2	06/27/2023	REVISED PER TCHD COMMENTS
3	08/25/2023	REVISED PER ST CLOUD ZONING COMMENTS
4	08/21/2024	RE-SUBMITTAL
5	09/23/2024	REVISED PER SJRWMD COMMENTS
6	10/30/2024	REVISED PER CITY COMMENTS

RCE CONSULTANTS, LLC
617 Atwater Drive
Altamonte Springs, FL 32701
Phone No. 407-682-0443
Gary@RCEconsultants.net

Engineer of Record
Signed by:
Laurence M. Poliner
Date: 2024.03.26
RCE CONSULTANTS, LLC
Certificate of Authorization #27597
Expires: 02/28/2025

PROJECT #: 121-002
DATE: 08/08/2022
DRAWN: GJD CHECKED: LMP

SHEET: C-3.0

Meeting: November 13, 2025

Agenda Item Type: Public Hearings
Ordinance No. 2025-55 Stephanie Leigh Rothstein Memorial Park ZMA

Community Development Agenda Item:
FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-55, an ordinance of the City Council of the City of St. Cloud, Florida, providing for the Zoning Amendment of the Zoning Map of the Land Development Code of the City of St. Cloud, Florida, specifically changing the zoning designation of approximately +/- 24.317 acres identified as Stephanie Leigh Rothstein Memorial Park Rezoning, Project #ZMA25-00008, from "A" Agriculture to "OR" Open Space/Recreation located at 2701 Missouri Avenue, providing for entering the designation on the official Zoning Map, filing of the Planning Commission recommendation and proof of publication, severability, and effective date.(Above is full title) **ACTION ON ORDINANCE NO. 2025-55** (This is a Quasi-Judicial proceeding)

Strategic Key Focus Areas:
High-Performing Government

Background Information:
The subject property is located at 2701 Missouri Avenue, St. Cloud, FL 34769, within the jurisdictional boundaries of the City of St. Cloud. The parcel is approximately +/- 24.317 acres and is located within the “A” Agricultural zoning district.

Stephanie Leigh Rothstein Memorial Park currently resides at the subject property and is actively utilized by the community as a soccer field that supports youth sports and recreational activities. The proposed Zoning Map Amendment seeks to rezone the subject property to “OR” Open Space and Recreational. This change will formally align the property’s zoning with its current and intended use and ensure consistency with the City’s Land Development Code and Comprehensive Plan. This amendment supports the City's long-term goals of enhancing public access to open spaces and addressing the deficit of recreationally zoned land.

On October 9, 2025, the City Council approved a staff-initiated amendment to the City’s Future Land Use Element through CPA24-00007 (Ordinance No. 2024-50). The amendment transitioned the subject parcels to a Future Land Use designation of “Park and Open Space” to establish consistency with the “OR” Open Space and Recreational Zoning District and to support the intended public use of the properties.

Legal Authority:
Per section 1.3.7 of the Land Development Code, The City Council shall review the recommendation from the Planning Commission and render a decision based on the recommendation and information presented. The Planning Commission recommendation is based on the 16 required findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant responses to the 16 required findings have been provided as an attachment for the City

Council's review.

Budget and Recommendation:
There is no cost associated with this item.

On August 19, 2025, the Planning Commission – Motion to recommend approval by Marshall. Seconded by Bridgeforth. Passed 4-0

Staff reviewed this request for a Zoning Map Amendment on or before June 16, 2025, with no objections. Staff recommends **APPROVAL** of Ordinance No. 2025-55 for a Zoning Map Amendment from "A" Agriculture to "OR" Open Space and Recreational for approximately +/- 24.317 acres of land.

Finance Director's Comments:
N/A

Procurement Director's Comments:
N/A

City Manager's Comments:
City Manager recommends approval

City Council Action:
11/13/25 - Final Action
10/9/25 - Motion by Urban to continue to the November 13th Council Meeting. Second by Paul. Passed 4-0.
9/11/25 - Motion by Gilbert to continue to the October 9th Council Meeting. Second by Fletcher. Passed 5-0.
8/14/25 - Motion to approve the First Reading & Introduction by Urban. Seconded by Fletcher. Passed 5-0.

Attachments:
1. 1 ZMA25-00008 STEPHANIE LEIGH PARK REZONING STAFF REPORT 11.13.25 CC
2. 2 ZMA25-00008 STEPHANIE LEIGH PARK REZONING ORDINANCE NO. 2025-55 11.13.25 CC
3. 3 ZMA25-00006 OC SCHOOLS COMMENTS
4. 4 ZMA25-00008 STEPHANIE LEIGH PARK REZONING BUSINESS IMPACT ESTIMATE

City Council Staff Report
Meeting Date: November 13, 2025

DRC Case No. /Ord. No.
ZMA25-00008 /2025-55

Type of Application
Zoning Map Amendment

Case Name
Stephanie Leigh Rothstein Memorial Park

Applicant/Agent
City of St. Cloud

Owner(s)
City of St. Cloud

Address/Location
2701 Missouri Avenue
St. Cloud, FL 34769

Parcel(s) ID No(s).
11-26-30-0725-0001-1160

Total Land Area
+/-24.317 acres

Project Planner
Ralph Keith
Associate Planner

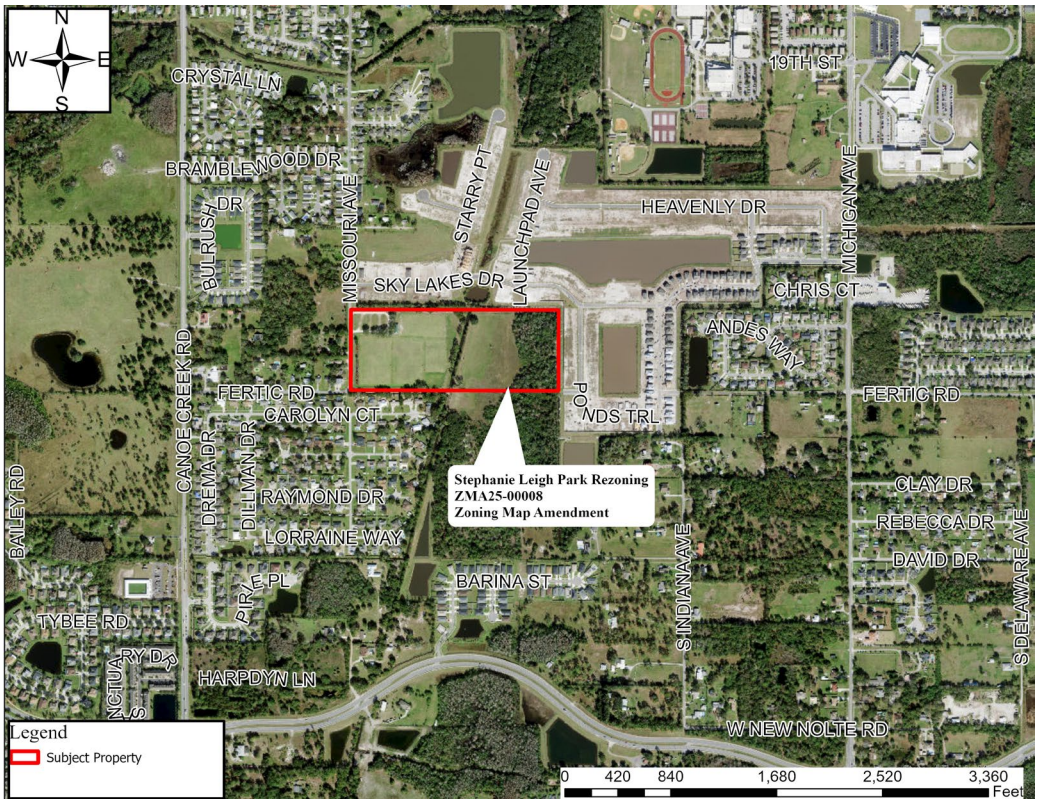


Figure 1 – Aerial Map

Request

The applicant is requesting consideration of a Zoning Map Amendment from "A" Agriculture to "OR" Open Space and Recreational for approximately +/- 24.317 acres of land. The subject property is shown in **Figure 1** above.

Background

The subject property is located at 2701 Missouri Avenue, St. Cloud, FL 34769, within the jurisdictional boundaries of the City of St. Cloud. The parcel is approximately +/- 24.317 acres and is located within the "A" Agricultural zoning district.

Stephanie Leigh Rothstein Memorial Park currently resides at the subject property and is actively utilized by the community as a soccer field that supports youth sports and recreational activities. The proposed Zoning Map Amendment seeks to rezone the subject property to "OR" Open Space and Recreational. This change will formally align the property's zoning with its current and intended use and ensure consistency with the City's Land Development Code and Comprehensive Plan. This amendment supports the City's long-term goals of enhancing public access to open spaces and addressing the deficit of recreationally zoned land.

On October 9, 2025, the City Council approved a staff-initiated amendment to the City's Future Land Use Element through CPA24-00007 (Ordinance No. 2024-50). The amendment transitioned the subject parcels to a Future Land Use designation of "Park and Open Space" to establish consistency with the "OR" Open Space and Recreational Zoning District and to support the intended public use of the properties.

The following table summarizes adjacent Future Land Use designations, Zoning districts and existing uses.

TABLE 1: ZONING & FUTURE LAND USE OF NEIGHBORING PROPERTIES

Direction	*Zoning*	*Future Land Use*	*Existing Land Use*
North	"PUD" Planned Unit Development	Low Density Residential	Single Family-Improved
East	"PUD" Planned Unit Development	Low Density Residential	Single Family-Improved
West	"A" Agriculture	Low Density Residential	Single Family-Improved
South	"R-1A" Single-Family Dwelling / "A" Agriculture	Low Density Residential	Single Family-Improved

Maximum density for development on the property is as follows:

FLU	*Max. Units*
LDR (Existing)	*23 (4 units/acre)*

**Calculated per gross acreage*

Maximum number of lots without exceeding density is as follows:

Zoning	*Total # Lots/Units*
A (Existing)	*~1*
OR (Proposed)	*~0*

The following table summarizes the development regulations for the requested zoning district according to LDC Section 3.4.1.C and Section 3.8.1.C Development/lot requirements.

	TABLE 2: AGRICULTURE LOT REQUIRMENTS					
Minimum Site Area (sq. ft.)	***Minimum Lot Width (ft.)***	***Dwelling Size Minimum Gross Floor Area (sq. ft.)***	***Minimum Lot Depth (ft.)***	***Maximum Lot Coverage***	***Maximum Impervious Coverage***	***Floor Area Ratio***
43,560	125	900	N/A	N/A	80%	N/A

TABLE 3: OPEN SPACE AND RECREATION LOT REQUIRMENTS					
Minimum Site Area (sq. ft.)	***Minimum Lot Width (ft.)***	***Minimum Lot Depth (ft.)***	***Maximum Lot Coverage***	***Maximum Impervious Coverage***	***Floor Area Ratio***
N/A	N/A	N/A	N/A	80%	0.3

Figures 2 & 3 below depict the current Future Land Use and Zoning districts within the City.

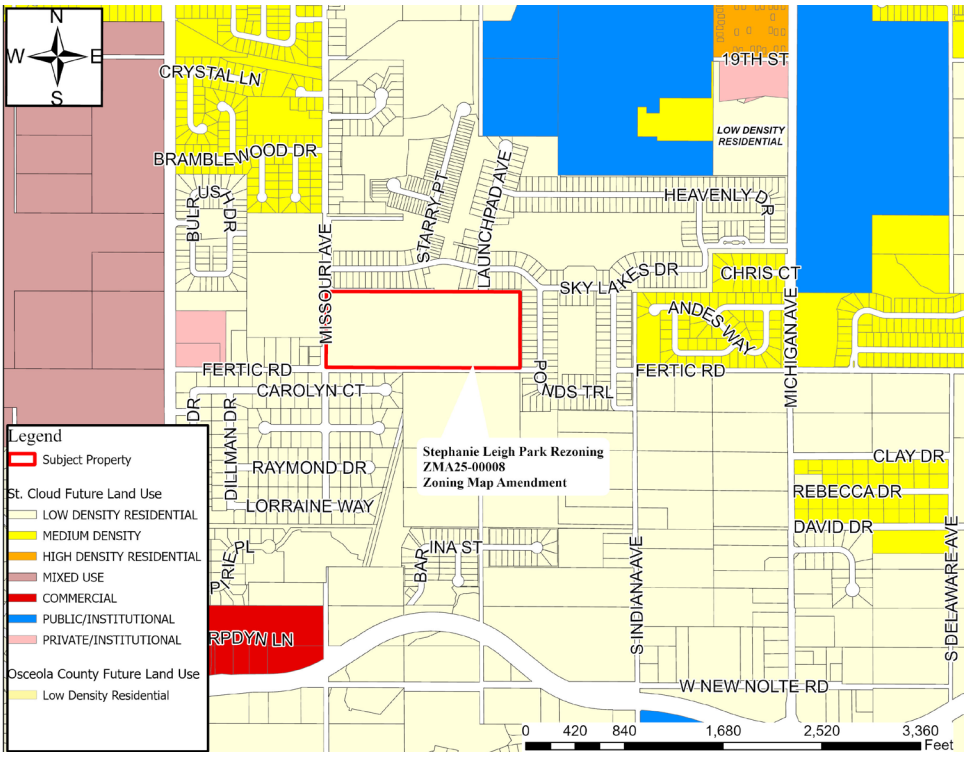


Figure 2 – Future Land Use Map

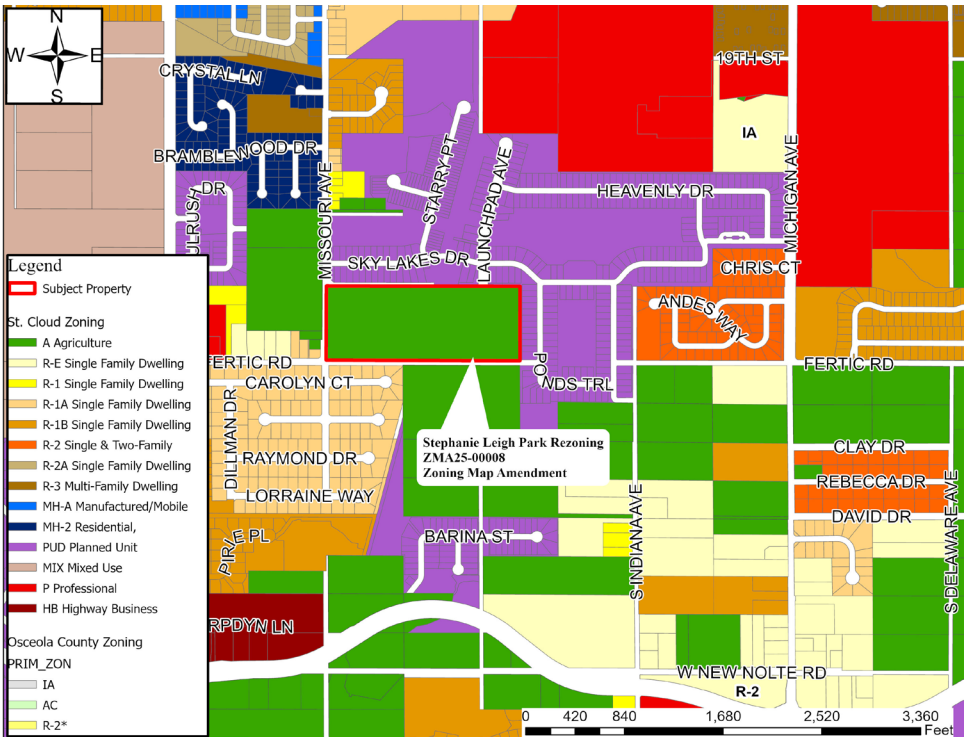


Figure 3 - Zoning Map

Public Notice

Notice of Public Hearing was mailed to property owners within 500 feet of the subject property and was advertised as required by Florida Statutes. No oral or written comments were received from the public at the time of this report's distribution. Additional public comment may be available at the public hearing.

Findings

Staff has reviewed the applicant's response to the 16 Required Findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant's responses follow the **bolded** LDC language, and staff's comments follow in *italics*:

1. **The proposed change is contrary to the established land use pattern;**

   "No, the proposed rezoning introduces a more inviting land use pattern that will ensure consistency across land use designations and to accurately represent the intended recreational use of park spaces."

   Stephanie Leigh Rothstein Memorial Park is currently zoned as "A" Agriculture, which is not consistent with the current Future Land Use designation of Park and Open Space. Per Section 3.4.1.A of the Land Development Code, Agricultural districts were intended to provide for primary agricultural use while preventing the creation of conditions which would become a nuisance or possible safety hazard, and which would generate high levels of traffic. The requested amendment to "OR" Open space and Recreational will create a designated area geared towards recreational and outdoor uses, aligning the proposed change with the established land use pattern.

2. **The proposed change would create an isolated district unrelated to the adjacent and nearby districts;**

   "No, the proposed change would not create an isolated district unrelated to adjacent and nearby districts."

   The proposed Zoning Map Amendment to "OR" Open Space and Recreational will not create an isolated district, as it is consistent with the current land use pattern in the area. The subject property currently serves the surrounding residential districts as a community park. This amendment will reinforce and enhance the parcel's current recreational function, allowing it to better serve the community's needs by fostering the development of a recreational hub and creating opportunities for compatible new uses, such as outdoor markets. Additionally, the amendment addresses a documented deficit of "OR" districts within the City, supporting broader goals for equitable access to open space and recreational amenities.

3. **The proposed change would materially alter the population density pattern and thereby increase or overtax the load on public facilities such as schools, utilities, streets, etc.;**

   "No, the proposed change would not materially alter the population density pattern and thereby increase or overtax the load on public facilities such as schools, utilities, and streets."

   The proposed Zoning Map Amendment application will not impact public school capacity, as dwelling units are not permitted in the "OR" Open Space and Recreational district. Per Land Development Code Section 3.8.1, park uses are permitted by right within the "OR" Open Space and Recreational district. Any future developments or additions to the parks will require a Site Development Plan, which may require additional improvements to existing infrastructure.

4. **Existing district boundaries are illogically drawn in relation to existing conditions on the property proposed for change;**

"No, existing district boundaries are not illogically drawn in relation to existing conditions on the property proposed for change."

District boundaries are not illogically drawn but are evolving pursuant to the needs of the city and the Comprehensive Plan, thus allowing for the consideration of this zoning map amendment. Per Land Development Code, Section 3.8.1.A, the Open Space and Recreational district is established to provide for conservation and protection of sensitive lands or other public lands deemed worthy of preservation within the city to ensure that present and future residents of the city can enjoy the benefits of the City's natural environment.

5. The proposed change would be contrary to the land use plan and would have an adverse effect on the comprehensive plan;

"No, the proposed change would not be contrary to the land use plan and would not have an adverse effect on the comprehensive plan."

The proposed Zoning Map Amendment aligns with the land use designations of the adjacent properties and the surrounding area. The parcel is currently surrounded by agricultural and single family development, creating a natural transition to Open Space and Recreation.

6. Change or changing conditions make the passage of the proposed amendment necessary;

"Yes, existing conditions are changing with the project and amendment is needed."

The request for a Zoning Map Amendment to "OR" Open Space and Recreational is compatible with the Future Land Use Element request of "Park and Open Space" and is consistent with the developing land use pattern in the area.

7. The proposed change will adversely influence living conditions in the neighborhood;

"No, the proposed change would not be contrary to the land use plan, nor adversely influence living conditions in the neighborhood"

The proposed Zoning Map Amendment will not negatively impact living conditions in the neighborhood; instead, it will promote and enhance the existing park by permitting additional uses such as Playfields, Open-Air markets, and Libraries for the benefit of the surrounding neighborhoods.

8. The proposed change will create or excessively increase traffic congestion or otherwise affect public safety;

"No, the proposed change will not create or excessively increase traffic congestion or otherwise affect public safety."

The site currently maintains access via Missouri Avenue. No additional development is planned as part of the requested Zoning Map Amendment.

9. The proposed change will create a drainage problem;

"No, the proposed change will not create a drainage problem."

Pursuant to Chapter 6 of the Land Development Code, water management systems shall be provided for all areas of development and accommodate runoff that flows into or across the development area without additional flooding of any other lands.

10. The proposed change will seriously reduce light or air to adjacent areas;

"No, the proposed change will not seriously reduce light or air to adjacent areas."

The proposed Zoning Map Amendment is not anticipated to impact access to light or air for

adjacent areas. There is no site development proposed at this time; however, any future development will be reviewed for consistency with the City's Comprehensive Plan. This review process will help ensure alignment with Objective 1.4, which calls for maintaining and improving City parks in a manner that reflects the recreational needs of the community and maximizes the potential of individual facilities.

11. The proposed change will adversely affect property values in the adjacent area;

"No, the proposed change will not adversely affect property values in the adjacent area."

The proposed Zoning Map Amendment is not expected to negatively impact property values in the adjacent area.

12. The proposed change will be a deterrent to the improvement or development of adjacent property in accordance with existing regulations;

"No, the proposed change will not be a deterrent to the improvement or development of adjacent property in accordance with existing regulations."

The proposed Zoning Map Amendment is intended to support the provision of green spaces and recreational uses, consistent with Objective 1.1 of the Comprehensive Plan, which seeks to ensure adequate land for public parks through the application of level of service standards and other criteria. These uses are compatible with, and may enhance, the development potential of adjacent properties.

13. The proposed change will constitute a grant of special privilege to an individual owner as contrasted with the public welfare;

"No, the proposed change will not constitute a grant of special privilege to an individual owner as contrasted with the public welfare."

The proposed Zoning Map Amendment does not grant special privilege to an individual owner, developer or contrast with public welfare.

14. There are substantial reasons why a reasonable use of property cannot be accomplished under existing zoning;

"The current zoning of properties does not align with the promotion of open space recreation."

The proposed Zoning Map Amendment seeks to preserve the existing "OR" Open Space and Recreational designation, consistent with the Comprehensive Plan's designation of the area as a community park. While the current zoning restricts many uses that could benefit the neighborhood, it also limits the full potential of the space. Enhancing the community park will improve the quality of life for local residents by providing access to amenities such as open-air markets, museums, community centers, and libraries, fostering greater community engagement and recreation opportunities.

15. Whether the change suggested is out of scale with the needs of the neighborhood of the city;

"The project is being propelled by the needs of the neighborhood and city, aiming to provide the community with expanded recreational opportunities."

The proposed Zoning Map amendment is not out of scale as the subject property is already developed as a Community park that supports soccer fields, and is identified in the City's Comprehensive Plan under the Recreation and Open Space Element.

16. It is impossible to find other adequate sites in the city for the proposed use in districts already zoned for such use.

"The site is presently utilized for recreational activities. The proposed rezoning facilitates the development of additional recreational space to better address the community's needs."

The City has a limited number of properties zoned as "OR" Open Space and Recreational. Within this designation, there are a limited number of parks, including Hopkins Park, Ralph V. Chisholm Regional Park, and The Ranch with this designation.

School Capacity Report

The Osceola County School District's School Capacity report stated that this Zoning Map Amendment has no impact on public school capacity.

Consistency With Strategic Plan Goals:

The proposed zoning map amendment meets the intent of the following City of St. Cloud Strategic Goals:

- ***High-Performing Government:*** *Focus on the continuity and sustainability of core public services.*

Staff Recommendation

Staff reviewed this request for a Zoning Map Amendment on or before June 16, 2025, with no objections. Staff recommends **APPROVAL** of Ordinance No. 2025-55 for a Zoning Map Amendment from "A" Agriculture to "OR" Open Space and Recreational for approximately +/- 24.317 acres of land.

Planning Commission Recommendation

Per section 1.3.7 of the Land Development Code, The City Council shall review the recommendation from the Planning Commission and render a decision based on the recommendation and information presented. The Planning Commission recommendation is based on the 16 required findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant responses to the 16 required findings have been provided as an attachment for the City Council's review.

On August 19, 2025, the Planning Commission – Motion to recommend approval by Marshall. Seconded by Bridgeforth. Passed 4-0

City Council Requested Action

The City Council shall review the recommendation from the Planning Commission and render a decision based on the recommendation and information presented. The Planning Commission recommendation is based on the 16 required findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant responses to the 16 required findings have been provided as an attachment for the City Council's review.

On August 14, 2025: Motion to approve the First Reading & Introduction by Urban. Seconded by Fletcher. Passed 5-0.

On September 11, 2025: Motion by Gilbert to continue to the October 9th Council Meeting. Second by Fletcher. Passed 5-0.

On October 09, 2025: Motion by Urban to continue to the November 13th Council Meeting. Second by Paul. Passed 4-0.

Attachments

- Ordinance No. 2025-55
- School Capacity Report
- Business Impact Estimate

RETURN TO:
CITY OF ST. CLOUD
COMMUNTIY DEVELOPMENT DEPARTMENT
1300 9TH STREET
ST. CLOUD, FL 34769

ORDINANCE NO. 2025-55

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, PROVIDING FOR THE ZONING AMENDMENT OF THE ZONING MAP OF THE LAND DEVELOPMENT CODE OF THE CITY OF ST. CLOUD, FLORIDA, SPECIFICALLY CHANGING THE ZONING DESIGNATION OF APPROXIMATELY +/- 24.317 ACRES IDENTIFIED AS STEPHANIE LEIGH ROTHSTEIN MEMORIAL PARK REZONING, PROJECT #ZMA25-00008, FROM "A" AGRICULTURE TO "OR" OPEN SPACE/RECREATION LOCATED AT 2701 MISSOURI AVENUE, PROVIDING FOR ENTERING THE DESIGNATION ON THE OFFICIAL ZONING MAP, FILING OF THE PLANNING COMMISSION RECOMMENDATION AND PROOF OF PUBLICATION, SEVERABILITY, AND EFFECTIVE DATE.

WHEREAS, zoning districts are required to be consistent with Comprehensive Plan of the City of St. Cloud; and,

WHEREAS, the proposed zoning is consistent with the proposed Future Land Use designation of "Park and Open Space"; and,

WHEREAS, the property described below is less than five percent (5%) of the total land area of the City of St. Cloud; and,

WHEREAS, the City Council has received the recommendation of the Planning Commission dated August 19, 2025; and,

WHEREAS, the City Council has held a Public Hearing on this matter after public notice has been provided, as required by law; and,

WHEREAS, it is in the best interest of the City of St. Cloud and its citizens that the proposed rezoning be approved.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of St. Cloud, Florida, as follows:

SECTION 1:

That Ordinance No. 87-HH of the City of St. Cloud, Florida, passed and adopted October 1, 1987, and any amendments to the ordinance, being the Land Development Code of the City of St. Cloud, Florida, is hereby amended to include and designate on the Official Zoning Map a "Open Space and Recreation " zoning district classification for the property described below and as shown on Exhibit "A":

Stephanie Leigh Rothstein Memorial Park:

PARCEL: 11-26-30-0725-0001-1160

LOTS 117, 118, 123, 124, AND THE WEST 1/4 OF LOTS 116 AND 125, SEMINOLE LAND AND INVESTMENT COMPANY'S INCORPORATED SUBDIVISION OF SECTION 11, TOWNSHIP 26 SOUTH, RANGE 30 EAST, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK B, PAGE 2, OF THE PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA.

Containing +/- 24.317 acres, more or less.

SECTION 2:

The property is rezoned to "OR" Open pace and Recreation, making applicable all provisions of the Land Development Code of the City of St. Cloud, Florida.

SECTION 3:

The City Manager or his/her designee is authorized and directed to promptly enter such change on the Official Zoning Map.

SECTION 4:

Upon adoption of this ordinance, the Planning Commission recommendation and "Proof of Publication" of the required Public Hearing notices shall be filed in the Community Development Department.

SECTION 5:

If any section or portion of a section of this ordinance proves to be invalid, unlawful or unconstitutional, it shall not be held to impair the validity, force or effect of any other section or part of this ordinance.

SECTION 6:

The City Clerk, after consultation with the City Attorney, is authorized to correct scrivener's errors found by filing a corrected copy of this ordinance in the official records of the City.

SECTION 7:

Effective Date. This ordinance shall become effective upon the effective date of Ordinance No. 2024-50 (CPA24-00007) as provided by law.

First Reading on the 14th day of August, 2025.

Final Reading on the 13th of November, 2025

CITY OF ST. CLOUD

_____

Christian B. Robertson, Mayor

ATTEST:

_____

Ivy Llauro, City Clerk

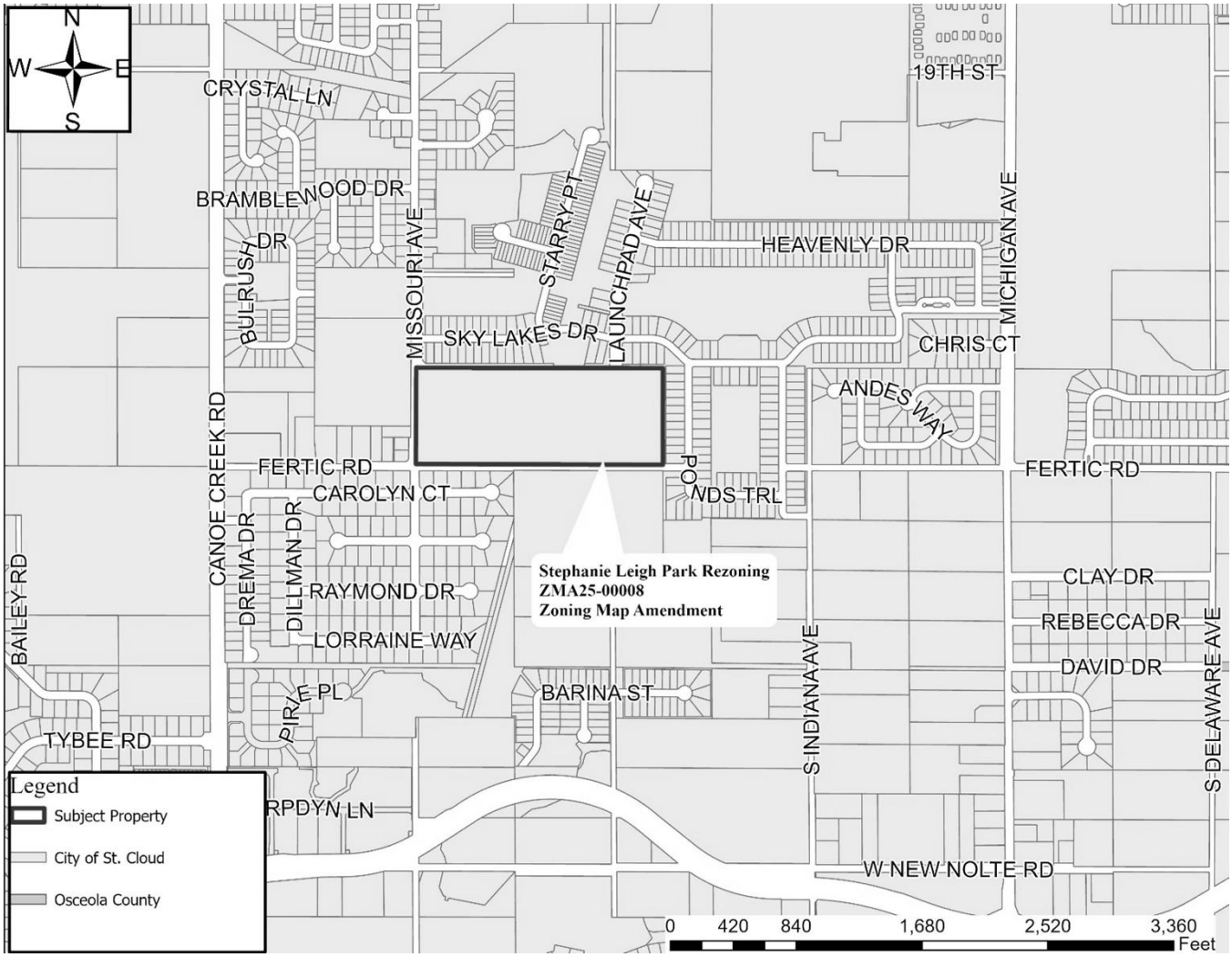
LEGAL IN FORM AND VALID IF ADOPTED:
de Beaubien, Simmons, Knight, Mantzaris & Neal, LLP

_____

Daniel F. Mantzaris, City Attorney

Pursuant to Section 695.26 (3) (f), this instrument exempt from Chapter 695, F.S.: Prepared by and return to a Public Official: City Manager, City of St. Cloud; 1300 9th Street; St. Cloud, Florida 34769

EXHIBIT "A"



PARCEL ID NO(S).

11-26-30-0725-0001-1160

THE SCHOOL DISTRICT OF OSCEOLA COUNTY, FLORIDA
PLANNING SERVICES DEPARTMENT
SCHOOL CAPACITY REPORT

SDOC#: 2024/25-0168 DRC#: ZMA25-00006

PROJECT NAME: City Parks Rezoning

PROJECT LOCATION: Multiple Addresses, see list

COMMENTS DUE DATE: 6.2.25

Current FLU: Multi
Requested FLU: N/A

Current Zoning: R-2/P/A
Requested Zoning: OR

PID: 01-26-30-0001-0122-0080
10-26-30-00U0-0030-0000
02-26-30-00U0-0050-0000
01-26-30-0001-0417-0010
02-26-30-00U0-0050-0000
01-26-30-0001-0393-0010+++

This ZMA application for the rezoning of city parks has no impact on public school capacity.

BUSINESS IMPACT ESTIMATE
ORDINANCE NO. 2025-55

TO: Mayor Robertson and Council Members

FROM: Ralph Keith Jr., Associate Planner

THRU: Melissa Dunklin, CPM, Community Development Director

DATE: October 3rd, 2025

SUBJECT: Ordinance No. 2025-55 - Business Impact Estimate

Section 166.041, *Florida Statutes*, effective July 1, 2023, requires the City prepare (or cause to be prepared) a business impact estimate prior to final consideration of an ordinance, subject to exemptions noted in the Law. The new law requires that the business impact estimate be posted on the City's website at the time of the published notice of the City Council's final consideration of the ordinance, or ten (10) days prior to the adoption public hearing, whichever is longer. Ordinance No. 2025-55 is proposed to be adopted by the City on November 13, 2025, and is subject to this new requirement. Following are the categories required to be addressed for the proposed ordinance based on the new legislation:

1. **Summary of proposed Ordinance No.: 2025-55.**

The purpose of this ordinance is to rezone City-owned property to better reflect its existing recreational uses and buildings. Ordinance No. 2025-55 reflects the City of St. Cloud's commitment to enhancing community engagement, promoting wellness, supporting economic growth, and ensuring long-term sustainability by providing modern recreational facilities that improve the quality of life for residents.

2. **Estimate of the direct economic impact of the proposed ordinance on private, for-profit businesses in the city**

   a. **Estimate of direct compliance costs that businesses may reasonably incur if the ordinance is enacted.**

The proposed ordinance will have no effect to cost on any business located within the City.

   b. **Identification of any new charge or fee on businesses subject to the proposed ordinance or for which businesses will be financially responsible.**

The proposed ordinance does not identify any new charges or fees on businesses.

c. An estimate of the City's regulatory costs, including an estimate of revenues from any new charges or fees that will be imposed on businesses to cover such costs.

The City will not collect any regulatory cost should this ordinance be adopted; as no new charges or fees will be imposed on businesses by the City.

3. A good faith estimates of the number of businesses likely to be impacted by the ordinance.

Adoption of the proposed ordinance will have no negative impact on businesses.

4. Any additional information the board determines may be useful.

The approval of Ordinance 2025-55 will realign the City's zoning map to reflect consistency with the Future Land Use designation for the City's parks, facilitating the approval of recreational and community-oriented uses.

Meeting: November 13, 2025

Agenda Item Type: Public Hearings
Ordinance No. 2025-56 Rummell Road ZMA

Community Development Agenda Item:
FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-56, an ordinance of the City Council of the City of St. Cloud, Florida, providing for the Zoning Amendment of the Zoning Map of the Land Development Code of the City of St. Cloud, Florida, specifically changing the zoning designation of approximately +/- 0.118 acres identified as Rummell Road Rezoning, Project #ZMA25-00009, from "R-1A" Single Family Dwelling to "OR" Open Space/Recreation generally located on the southeast corner of Rummell Road and Eastern Avenue, providing for entering the designation on the official Zoning Map, filing of the Planning Commission recommendation and proof of publication, severability, and effective date. (Above is full title) **ACTION ON ORDINANCE NO. 2025-56** (This is a Quasi-Judicial proceeding)

Strategic Key Focus Areas:
High-Performing Government

Background Information:
The subject property is generally located on the southeast corner of Rummell Road and Eastern Avenue. The property consists of one parcel totaling approximately +/- 0.118 acres within the City of St. Cloud.

The City of St. Cloud acquired the property on February 25, 2008. The City is now proposing to rezone the parcel to “OR” Open Space and Recreation to repurpose the land for future park use. This rezoning aligns with the City's commitment to expanding recreational opportunities and enhancing a deficit of community green spaces.

On October 9, 2025, City Council approved a staff-initiated update to the City’s Future Land Use Element through CPA24-00007 (Ordinance 2024-50), which included transition of the above-mentioned parcels to a Future Land Use Designation of “Park and Open Space” to facilitate the land use necessary to support the “OR” Open Space and Recreational Zoning District.

Legal Authority:
Per section 1.3.7 of the Land Development Code, The City Council shall review the recommendation from the Planning Commission and render a decision based on the recommendation and information presented. The Planning Commission recommendation is based on the 16 required findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant responses to the 16 required findings have been provided as an attachment for the City Council’s review.

Budget and Recommendation:
There is no cost associated with this item.

On August 19, 2025: Planning Commission – Motion to recommend approval by Marshall. Seconded by Bridgeforth. Passed 4-0.

Staff reviewed this request for a Zoning Map Amendment on or before June 16, 2025, with no objections. Staff recommends **APPROVAL** of Ordinance No. 2025-56 for a Zoning Map Amendment from "R-1A" Single-Family Dwelling to "OR" Open Space and Recreation for approximately +/- 0.118 acres of land.

Finance Director's Comments:
N/A

Procurement Director's Comments:
N/A

City Manager's Comments:
City Manager recommends approval

City Council Action:
9/11/25 - Final Action
10/09/25 - Motion by Paul to continue to the November 13th Council Meeting. Second by Urban. Passed 4-0.
9/11/25 - Motion by Paul to continue to the October 9th Council Meeting. Second by Urban. Passed 5-0.
8/14/25 - Motion to approve the First Reading & Introduction by Gilbert. Seconded by Urban. Passed 5-0.

Attachments:
1. 1 ZMA25-00009 RUMMEL ROAD REZONING STAFF REPORT 11.13.25 CC
2. 2 ZMA25-00009 RUMMEL ROAD REZONING ORDINANCE NO. 2025-56 11.13.25 CC
3. 3 ZMA25-00009 RUMMEL ROAD REZONING OC SCHOOLS COMMENTS
4. 4 ZMA25-00009 RUMMEL ROAD REZONING BUSINESS IMPACT ESTIMATE

City Council Staff Report
Meeting Date: November 13, 2025

DRC Case No. /Ord. No.
ZMA25-00009 /2025-56

Type of Application
Zoning Map Amendment

Case Name
Rummell Road Rezoning

Applicant/Agent
City of St. Cloud

Owner(s)
City of St. Cloud

Address/Location
Southeast Corner of Rummell Road and Eastern Avenue

Parcel(s) ID No(s).
36-25-30-0600-000B-0020

Total Land Area
+/-0.118 acres

Project Planner
Ralph Keith
Associate Planner



Figure 1 – Aerial Map

Request

The applicant is requesting consideration of a Zoning Map Amendment from "R-1A" Single-Family Dwelling to "OR" Open Space and Recreation for approximately +/- 0.118 acres of land. The subject property is shown in **Figure 1** above.

Background

The subject property is generally located on the Southeast Corner of Rummell Road and Eastern Avenue. The property consists of one parcel totaling approximately +/- 0.118 acres within the City of St. Cloud.

The City of St. Cloud acquired the property on February 25, 2008. The City is now proposing to rezone the parcel to "OR" Open Space and Recreation to repurpose the land for future park use. This rezoning aligns with the City's commitment to expanding recreational opportunities and enhancing a deficit of community green spaces.

On October 9, 2025, the City Council approved a staff-initiated amendment to the City's Future Land Use Element through CPA24-00007 (Ordinance No. 2024-50). The amendment transitioned the subject parcels to a Future Land Use designation of "Park and Open Space" to establish consistency with the "OR" Open Space and Recreational Zoning District and to support the intended public use of the properties.

The following table summarizes the development regulations for the requested zoning district according to LDC Section 3.5.3.C & 3.8.1.C - Development/lot requirements.

TABLE 1: ZONING & FUTURE LAND USE OF NEIGHBORING PROPERTIES			
Direction	***Zoning***	***Future Land Use***	***Existing Land Use***
North	"R-1A" Single-Family Dwelling	Low Density Residential	Single Family – Improved
East	"R-1" Single-Family Dwelling	Low Density Residential	Vacant
West	"R-1A" Single-Family Dwelling	Low Density Residential	Vacant
South	"R-2" Single- & Two-Family Dwelling	Medium Density Residential	Residential Common Elements / Area Vacant

TABLE 2: R-1A SINGLE-FAMILY DWELLING LOT REQUIRMENTS					
Minimum Site Area (sq. ft.)	**Minimum Lot Width (ft.)**	**Dwelling Size Minimum Gross Floor Area (sq. ft.)**	**Maximum Lot**	**Minimum Site Area (sq. ft.)**	**Minimum Lot Width (ft.)**
9,000	62.5	1,000	50%[2]	80%	4

TABLE 3: OPEN SPACE AND RECREATION LOT REQUIRMENTS					
Minimum Site Area (sq. ft.)	***Minimum Lot Width (ft.)***	***Minimum Lot Depth (ft.)***	***Maximum Lot Coverage***	***Maximum Impervious Coverage***	***Floor Area Ratio***
N/A	N/A	N/A	N/A	80%	0.3

Figures 2 & 3 below depict the current Future Land Use and Zoning districts within the City.

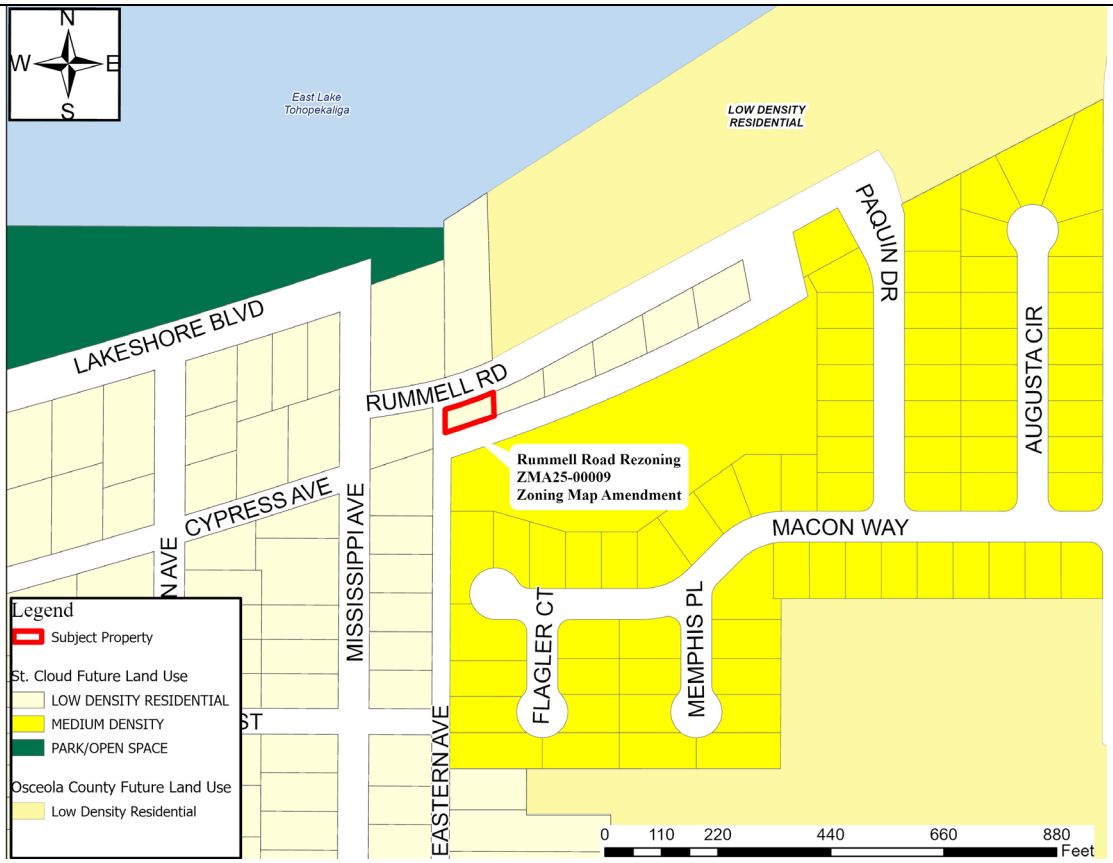


Figure 2 – Future Land Use Map

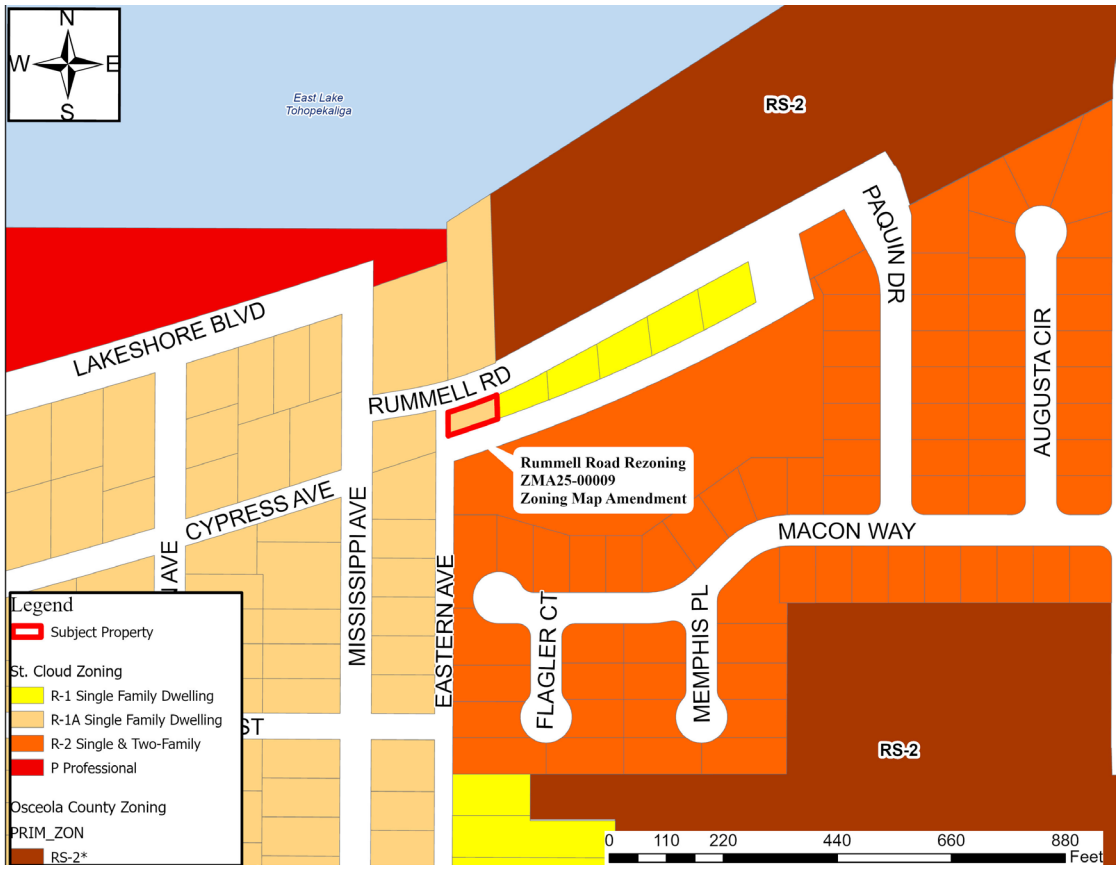


Figure 3 - Zoning Map

Public Notice

Notice of Public Hearing was mailed to property owners within 500 feet of the subject property and was advertised as required by State Statutes. No oral or written comments were received from the public at the time of this report's distribution. Additional public comment may be available at the public hearing.

Findings

Staff has reviewed the applicant's response to the 16 Required Findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant's responses follow the **bolded** LDC language, and staff's comments follow in *italics*:

1. **The proposed change is contrary to the established land use pattern;**

   "No, the proposed rezoning introduces a more inviting land use pattern that will ensure consistency across land use designations and to accurately represent the intended recreational use of park spaces."

   The current land use designation for the existing parcel is "R-1A" Single-Family Dwelling, which is not consistent with the proposed Future Land Use designation of Park and Open Space. According to Land Development Code Section 3.5.1.A, the intent of the R-1A district is to encompass lands, water, and structures characterized by low-density development. These areas are primarily residential in nature, intended for single-family dwellings, and include additional open space where such development is desirable and likely to continue. While non-residential use may be permitted, they are intended to serve the immediate and adjacent areas. The proposed change will result in an increase in open space, enhancing consistency with the Future Land Use designation. Therefore, aligning the proposed change with the established land use pattern.

2. **The proposed change would create an isolated district unrelated to the adjacent and nearby districts;**

   "No, the proposed change would not create an isolated district unrelated to adjacent and nearby districts."

   The proposed Zoning Map Amendment to "OR" Open Space and Recreation will not create an isolated district, as it is consistent with the current land use pattern in the area. The referenced parcel is currently vacant. The proposed change will enhance the existing nature of the area to better meet the surrounding community's recreational needs, while addressing a deficit of "OR" Open Space and Recreation districts within the City.

3. **The proposed change would materially alter the population density pattern and thereby increase or overtax the load on public facilities such as schools, utilities, streets, etc.;**

   "No, the proposed change would not materially alter the population density pattern and thereby increase or overtax the load on public facilities such as schools, utilities, and streets."

   The proposed Zoning Map Amendment application will not impact public school capacity, as dwelling units are not permitted in the "OR" Open Space and Recreation district. Per Land Development Code Section 3.8.1, park uses are permitted by right within the "OR" Open Space and Recreation district. Any future developments or additions to the parks will require a Site Development Plan, which may necessitate additional improvements to existing infrastructure.

4. **Existing district boundaries are illogically drawn in relation to existing conditions on the property proposed for change;**

   "No, existing district boundaries are not illogically drawn in relation to existing conditions on the property proposed for change."

   District boundaries are not illogically drawn but are evolving pursuant to the needs of the city and the Comprehensive Plan, thus allowing for the consideration of this zoning map amendment. Per Land Development Code, Section 3.8.1.A, the Open Space and Recreation district is established to provide for conservation and protection of sensitive lands or other public lands deemed worthy of preservation within the city to ensure that present and future residents of the city can enjoy the benefits of the natural environment of the city.

5. **The proposed change would be contrary to the land use plan and would have an adverse effect on the comprehensive plan;**

   "No, the proposed change would not be contrary to the land use plan and would not have an adverse effect on the comprehensive plan."

   The proposed Zoning Map Amendment aligns with the land use designation of adjacent properties and the surrounding area.

6. **Change or changing conditions make the passage of the proposed amendment necessary;**

   "Yes, existing conditions are changing with the project and amendment is needed."

   The request for a Zoning Map Amendment to "OR" Open Space and Recreation is compatible with the Future Land Use Element request of "Park and Open Space" and is consistent with the developing land use pattern in the area.

7. **The proposed change will adversely influence living conditions in the neighborhood;**

   "No, the proposed change would not be contrary to the land use plan, nor adversely influence living conditions in the neighborhood"

   The proposed Zoning Map Amendment should not negatively impact living conditions in the neighborhood; instead, it will promote and enhance the existing park by permitting additional uses such as Open-Air Markets, Government Facilities, and Communication Facilities for the benefit of the surrounding neighborhoods.

8. **The proposed change will create or excessively increase traffic congestion or otherwise affect public safety;**

   "No, the proposed change will not create or excessively increase traffic congestion or otherwise affect public safety."

   The subject property currently maintains access via Rummell Road and Eastern Avenue. No additional development is planned as part of the requested Zoning Map Amendment.

9. **The proposed change will create a drainage problem;**

   "No, the proposed change will not create a drainage problem."

   Pursuant to Chapter 6 of the Land Development Code, water management systems shall be provided for all areas of development and accommodate runoff that flows into or across the development area without additional flooding of any other lands.

10. The proposed change will seriously reduce light or air to adjacent areas;

"No, the proposed change will not seriously reduce light or air to adjacent areas."

The proposed Zoning Map Amendment may impact light or air in adjacent areas. However, a photometric plan will be reviewed during the Site Development Plan process to address and mitigate any potential effects when an application is ready for review. At this time, no site development is proposed.

11. The proposed change will adversely affect property values in the adjacent area;

"No, the proposed change will not adversely affect property values in the adjacent area."

The proposed Zoning Map Amendment is not expected to negatively impact property values in the adjacent area.

12. The proposed change will be a deterrent to the improvement or development of adjacent property in accordance with existing regulations;

"No, the proposed change will not be a deterrent to the improvement or development of adjacent property in accordance with existing regulations."

The proposed Zoning Map Amendment is intended to support the provision of green spaces and recreational uses, consistent with Objective 1.1 of the Comprehensive Plan, which seeks to ensure adequate land for public parks through the application of level of service standards and other criteria. These uses are compatible with, and may enhance, the development potential of adjacent properties

13. The proposed change will constitute a grant of special privilege to an individual owner as contrasted with the public welfare;

"No, the proposed change will not constitute a grant of special privilege to an individual owner as contrasted with the public welfare."

The proposed Zoning Map Amendment does not grant special privilege to an individual owner, developer or contrast with public welfare.

14. There are substantial reasons why a reasonable use of property cannot be accomplished under existing zoning;

"The current zoning of properties does not align with the promotion of open space recreation."

The proposed Zoning Map Amendment seeks to establish an "OR" zoning district in order to be consistent and compatible with the Future Land Use Element update that will designate this property as Recreation and Open Space. While the existing "R-1A" zoning district would allow for publicly owned recreation areas, the uses would be limited. Allowing the "OR" zoning district would accommodate a wider variety of uses allowed within a designated park or open space.

15. Whether the change suggested is out of scale with the needs of the neighborhood of the city;

"The project is being propelled by the needs of the neighborhood and city, aiming to provide the community with expanded recreational opportunities."

The proposed Zoning Map amendment is not out of scale, as the subject property is currently vacant and the amendment is consistent with the Capital Improvement Program process outlined in Policy 1.64 of the City's Comprehensive Plan. The property is being acquired to

address the identified need for future park space, as reflected on the Future Land Use Map.

16. **It is impossible to find other adequate sites in the city for the proposed use in districts already zoned for such use.**

    "The site is presently utilized for recreational activities. The proposed rezoning facilitates the development of additional recreational space to better address the community's needs."

    The City has identified areas with a deficit in park acreage, as outlined in the Recreation and Open Space Element of the Comprehensive Plan. Currently, only a limited number of parcels are zoned "OR" Open Space and Recreation, including Hopkins Park, Ralph V. Chisholm Regional Park, and The Ranch. The subject property is not already developed as a park and would be identified in the Recreation and Open Space Element under Policy 1.1.2 as a Mini Park due to the existing acreage of +/- 0.118 acres.

School Capacity Report

The Osceola County School District's School Capacity report stated that this Zoning Map Amendment has no impact on public school capacity.

Consistency With Strategic Plan Goals:

The proposed zoning map amendment meets the intent of the following City of St. Cloud Strategic Goals:

- ***High-Performing Government:*** *Focus on the continuity and sustainability of core public services.*

Staff Recommendation

Staff reviewed this request for a Zoning Map Amendment on or before June 16, 2025, with no objections. Staff recommends **APPROVAL** of Ordinance No. 2025-56 for a Zoning Map Amendment from "R-1A" Single-Family Dwelling to "OR" Open Space and Recreation for approximately +/- 0.118 acres of land.

Planning Commission Recommendation

Per section 1.3.7 of the Land Development Code, The City Council shall review the recommendation from the Planning Commission and render a decision based on the recommendation and information presented. The Planning Commission recommendation is based on the 16 required findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant responses to the 16 required findings have been provided as an attachment for the City Council's review.

On August 19, 2025: Planning Commission – Motion to recommend approval by Marshall. Seconded by Bridgeforth. Passed 4-0.

City Council Requested Action

The City Council shall review the recommendation from the Planning Commission and render a decision based on the recommendation and information presented. The Planning Commission recommendation is based on the 16 required findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant responses to the 16 required findings have been provided as an attachment for the City Council's review.

On August 14, 2025: Motion to approve the First Reading & Introduction by Gilbert. Seconded by Urban. Passed 5-0.

On September 11, 2025: Motion by Paul to continue to the October 9th Council Meeting. Second by Urban. Passed 5-0.

On October 09, 2025: Motion by Paul to continue to the November 13th Council Meeting. Second by Urban. Passed 4-0.

Attachments

- Ordinance No. 2025-56
- School Capacity Report
- Business Impact Estimate

RETURN TO:
CITY OF ST. CLOUD
COMMUNTIY DEVELOPMENT DEPARTMENT
1300 9TH STREET
ST. CLOUD, FL 34769

ORDINANCE NO. 2025-56

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, PROVIDING FOR THE ZONING AMENDMENT OF THE ZONING MAP OF THE LAND DEVELOPMENT CODE OF THE CITY OF ST. CLOUD, FLORIDA, SPECIFICALLY CHANGING THE ZONING DESIGNATION OF APPROXIMATELY +/- 0.118 ACRES IDENTIFIED AS RUMMELL ROAD REZONING, PROJECT #ZMA25-00009, FROM "R-1A" SINGLE FAMILY DWELLING TO "OR" OPEN SPACE/RECREATION GENERALLY LOCATED ON THE SOUTHEAST CORNER OF RUMMELL ROAD AND EASTERN AVENUE, PROVIDING FOR ENTERING THE DESIGNATION ON THE OFFICIAL ZONING MAP, FILING OF THE PLANNING COMMISSION RECOMMENDATION AND PROOF OF PUBLICATION, SEVERABILITY, AND EFFECTIVE DATE.

WHEREAS, zoning districts are required to be consistent with Comprehensive Plan of the City of St. Cloud; and,

WHEREAS, the proposed zoning is consistent with the proposed Future Land Use designation of “Park and Open Space”; and,

WHEREAS, the property described below is less than five percent (5%) of the total land area of the City of St. Cloud; and,

WHEREAS, the City Council has received the recommendation of the Planning Commission dated August 19, 2025; and,

WHEREAS, the City Council has held a Public Hearing on this matter after public notice has been provided, as required by law; and,

WHEREAS, it is in the best interest of the City of St. Cloud and its citizens that the proposed rezoning be approved.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of St. Cloud, Florida, as follows:

SECTION 1:

That Ordinance No. 87-HH of the City of St. Cloud, Florida, passed and adopted October 1, 1987, and any amendments to the ordinance, being the Land Development Code of the City of St. Cloud, Florida, is hereby amended to include and designate on the Official Zoning Map a “Open Space and Recreation ” zoning district classification for the property described below and as shown on Exhibit “A”:

PARCEL: 11-26-30-0725-0001-1160

Legal Description:

LOT 2, BLOCK B, LESS THE MOST NORTHERLY 10 FEET THEREOF, OSCEOLA SHORES, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 1, PAGE 320A, OF THE PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA.

Containing +/- 0.118 acres, more or less.

SECTION 2:

The property is rezoned to "OR" Open Space and Recreation, making applicable all provisions of the Land Development Code of the City of St. Cloud, Florida.

SECTION 3:

The City Manager or his/her designee is authorized and directed to promptly enter such change on the Official Zoning Map.

SECTION 4:

Upon adoption of this ordinance, the Planning Commission recommendation and "Proof of Publication" of the required Public Hearing notices shall be filed in the Community Development Department.

SECTION 5:

If any section or portion of a section of this ordinance proves to be invalid, unlawful or unconstitutional, it shall not be held to impair the validity, force or effect of any other section or part of this ordinance.

SECTION 6:

The City Clerk, after consultation with the City Attorney, is authorized to correct scrivener’s errors found by filing a corrected copy of this ordinance in the official records of the City.

SECTION 7:

Effective Date. This ordinance shall become effective upon the effective date of Ordinance No. 2024-50 (CPA24-00007) as provided by law.

First Reading on the 14th day of August, 2025.

Final Reading on the 13th day of November, 2025.

CITY OF ST. CLOUD

_____

Christian B. Robertson, Mayor

ATTEST:

_____

Ivy Llauro, City Clerk

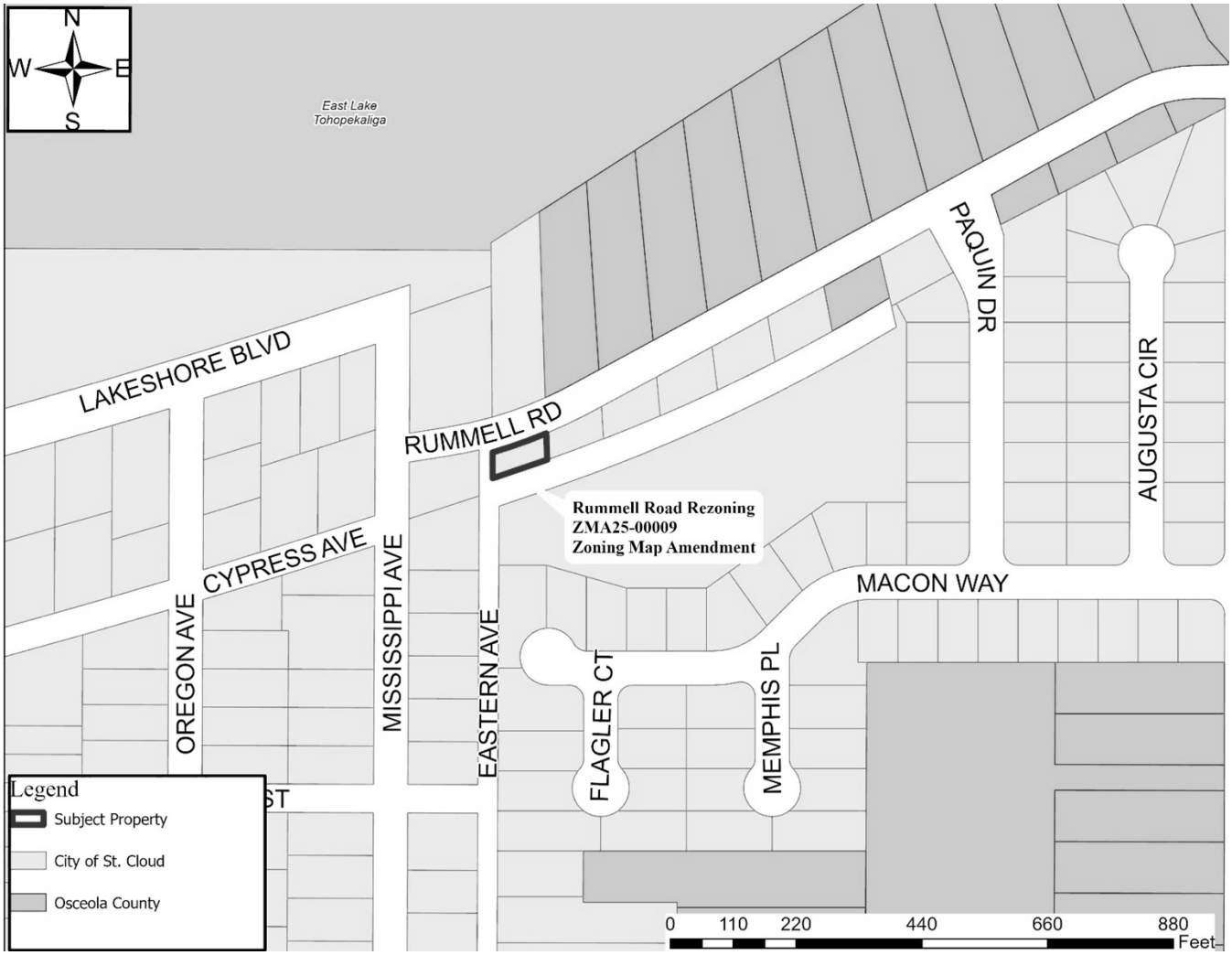
LEGAL IN FORM AND VALID IF ADOPTED:
de Beaubien, Simmons, Knight, Mantzaris & Neal, LLP

_____

Daniel F. Mantzaris, City Attorney

Pursuant to Section 695.26 (3) (f), this instrument exempt from Chapter 695, F.S.: Prepared by and return to a Public Official: City Manager, City of St. Cloud; 1300 9th Street; St. Cloud, Florida 34769

EXHIBIT "A"



PARCEL ID NO(S).

36-25-30-4620-000B-0020

THE SCHOOL DISTRICT OF OSCEOLA COUNTY, FLORIDA
PLANNING SERVICES DEPARTMENT
SCHOOL CAPACITY REPORT

SDOC#: 2024/25-0168 DRC#: ZMA25-00006

PROJECT NAME: City Parks Rezoning

PROJECT LOCATION: Multiple Addresses, see list

COMMENTS DUE DATE: 6.2.25

Current FLU: Multi
Requested FLU: N/A

Current Zoning: R-2/P/A
Requested Zoning: OR

PID: 01-26-30-0001-0122-0080
10-26-30-00U0-0030-0000
02-26-30-00U0-0050-0000
01-26-30-0001-0417-0010
02-26-30-00U0-0050-0000
01-26-30-0001-0393-0010+++

This ZMA application for the rezoning of city parks has no impact on public school capacity.

BUSINESS IMPACT ESTIMATE
ORDINANCE NO. 2025-56

TO: Mayor Robertson and Council Members

FROM: Ralph Keith Jr., Associate Planner

THRU: Melissa Dunklin, CPM, Community Development Director

DATE: October 3rd, 2025

SUBJECT: Ordinance No. 2025-56 - Business Impact Estimate

Section 166.041, *Florida Statutes*, effective July 1, 2023, requires the City prepare (or cause to be prepared) a business impact estimate prior to final consideration of an ordinance, subject to exemptions noted in the Law. The new law requires that the business impact estimate be posted on the City's website at the time of the published notice of the City Council's final consideration of the ordinance, or ten (10) days prior to the adoption public hearing, whichever is longer. Ordinance No. 2025-56 is proposed to be adopted by the City on November 13, 2025, and is subject to this new requirement. Following are the categories required to be addressed for the proposed ordinance based on the new legislation:

1. **Summary of proposed Ordinance No.: 2025-56.**

The purpose of this ordinance is to rezone City-owned property to better reflect its existing recreational uses and buildings. Ordinance No. 2025-56 reflects the City of St. Cloud's commitment to enhancing community engagement, promoting wellness, supporting economic growth, and ensuring long-term sustainability by providing modern recreational facilities that improve the quality of life for residents.

2. **Estimate of the direct economic impact of the proposed ordinance on private, for-profit businesses in the city**

   a. **Estimate of direct compliance costs that businesses may reasonably incur if the ordinance is enacted.**

The proposed ordinance will have no effect to cost on any business located within the City.

   b. **Identification of any new charge or fee on businesses subject to the proposed ordinance or for which businesses will be financially responsible.**

The proposed ordinance does not identify any new charges or fees on businesses.

c. An estimate of the City's regulatory costs, including an estimate of revenues from any new charges or fees that will be imposed on businesses to cover such costs.

The City will not collect any regulatory cost should this ordinance be adopted; as no new charges or fees will be imposed on businesses by the City.

3. A good faith estimates of the number of businesses likely to be impacted by the ordinance.

Adoption of the proposed ordinance will have no negative impact on businesses.

4. Any additional information the board determines may be useful.

The approval of Ordinance 2025-56 will realign the City's zoning map to reflect consistency with the Future Land Use designation for the City's parks, facilitating the approval of recreational and community-oriented uses.

Meeting: November 13, 2025

Agenda Item Type: Public Hearings
Ordinance No. 2025-57 Cannery Park ZMA

Community Development Agenda Item:
FINAL PUBLIC HEARING FOR ORDINANCE NO. 2025-57, an ordinance of the City Council of the City of St. Cloud, Florida, providing for the Zoning Amendment of the Zoning Map of the Land Development Code of the City of St. Cloud, Florida, specifically changing the zoning designation of approximately +/- 0.97 acres identified as Cannery Park Rezoning, Project #ZMA25-00010, from "R-2" Single & Two-Family Dwelling to "OR" Open Space/Recreation located at 901 Virginia Avenue, providing for entering the designation on the official Zoning Map, filing of the Planning Commission recommendation and proof of publication, severability, and effective date. (Above is full title) **ACTION ON ORDINANCE NO. 2025-57** (This is a Quasi-Judicial proceeding)

Strategic Key Focus Areas:
High-Performing Government

Background Information:
The subject property is located at 901 Virginia Avenue and comprised of one parcel totaling approximately +/- 0.97 acres within the City of St. Cloud. The parcels are currently improved with a community building, picnic tables, a baseball field, a basketball court, and playgrounds.

On October 9, 2025, the City Council approved a staff-initiated amendment to the City's Future Land Use Element through CPA24-00007 (Ordinance No. 2024-50). The amendment maintained the existing "Park and Open Space" Future Land Use designation of the subject properties to support their intended public use.

Legal Authority:
Per section 1.3.7 of the Land Development Code, The City Council shall review the recommendation from the Planning Commission and render a decision based on the recommendation and information presented. The Planning Commission recommendation is based on the 16 required findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant responses to the 16 required findings have been provided as an attachment for the City Council's review.

Budget and Recommendation:
There is no cost associated with this item.

On August 19, 2025, the Planning Commission – Motion to recommend approval by Marshall. Seconded by Bridgeforth. Passed 4-0

Staff reviewed this request for a Zoning Map Amendment on or before June 16, 2025, with no objections. Staff recommends **APPROVAL** of Ordinance No. 2025-57 for a Zoning Map

Amendment from “R-2” Single & Two-Family Dwelling to “OR” Open Space and Recreation for approximately +/- 0.97 acres of land.

Finance Director's Comments:
N/A

Procurement Director's Comments:
N/A

City Manager's Comments:
City Manager recommends approval

City Council Action:
11/13/25 - Final Action
10/9/25 - Motion by Urban to continue to the November 13th Council Meeting. Second by Gilbert. Passed 4-0.
9/11/25 - Motion by Fletcher to continue to the October 9th Council meeting. Seconded by Paul. Passed 5-0.
8/14/25 - Motion to approve the First Reading & Introduction by Urban. Seconded by Fletcher. Passed 5-0.

Attachments:
1. 1 ZMA25-00010 CANNERY PARK REZONING STAFF REPORT 11.13.25 CC
2. 2 ZMA25-00010 CANNERY PARK REZONING ORDINANCE NO. 2025-57 11.13.25 CC
3. 3 ZMA25-00006 CANNERY PARK REZONING OC SCHOOLS COMMENTS
4. 4 ZMA25-00006 CANNERY PARK REZONING BUSINESS IMPACT ESTIMATE

City Council Staff Report
Meeting Date: November 13, 2025

DRC Case No. /Ord. No.
ZMA25-00010 /2025-57

Type of Application
Zoning Map Amendment

Case Name
Cannery Park Rezoning

Applicant/Agent
City of St. Cloud

Owner(s)
City of St. Cloud

Address/Location
901 Virgina Avenue, St. Cloud, FL 34769

Parcel(s) ID No(s).
01-26-30-0001-0122-0080

Total Land Area
+/-0.97 acres

Project Planner
Ralph Keith
Associate Planner

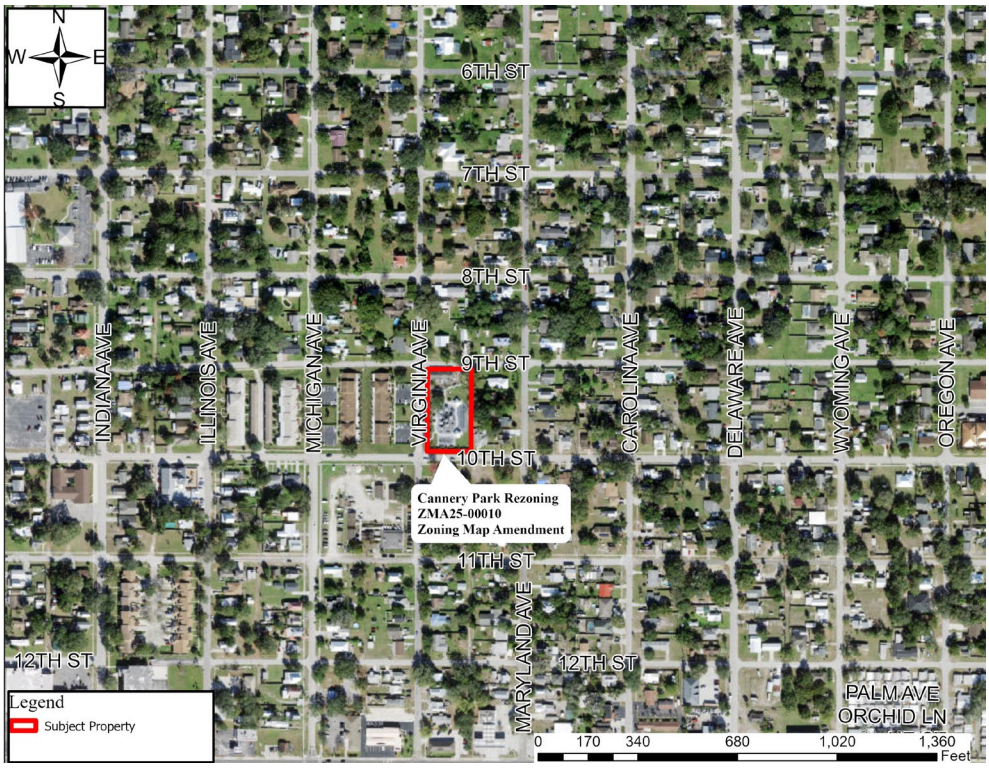


Figure 1 – Aerial Map

Request

The applicant is requesting consideration of a Zoning Map Amendment from "R-2" Single & Two-Family Dwelling to "OR" Open Space and Recreation for approximately +/- 0.97 acres of land. The subject property is shown in **Figure 1** above.

Background

The subject property is located at 901 Virginia Avenue and comprised of one parcel totaling approximately +/- 0.97 acres within the City of St. Cloud. The parcels are currently improved with a community building, picnic tables, a baseball field, a basketball court, and playgrounds.

On October 9, 2025, the City Council approved a staff-initiated amendment to the City's Future Land Use Element through CPA24-00007 (Ordinance No. 2024-50). The amendment transitioned the subject parcels to a Future Land Use designation of "Park and Open Space" to establish consistency with the "OR" Open Space and Recreational Zoning District and to support the intended public use of the properties.

The following table summarizes the development regulations for the requested zoning district according to LDC Section 3.5.2.C and Section 3.8.1.C Development/lot requirements.

TABLE 1: ZONING & FUTURE LAND USE OF NEIGHBORING PROPERTIES			
Direction	***Zoning***	***Future Land Use***	***Existing Land Use***
North	"R-2" Single & Two-Family Dwelling	Medium Density Residential	Single Family – Improved
East	"R-2" Single & Two-Family Dwelling	Medium Density Residential	Single Family – Improved
West	"R-3" Multi-Family Dwelling	Medium Density Residential	Residential Common Elements / Area Vacant
South	"R-2" Single & Two-Family Dwelling	Public / Institutional	Public School - Improved

TABLE 2: R-2 SINGLE- & TWO- FAMILY DWELLING LOT REQUIRMENTS					
Minimum Site Area (sq. ft.)	**Minimum Lot Width (ft.)**	**Dwelling Size Minimum Gross Floor Area (sq. ft.)**	**Maximum Lot**	**Minimum Site Area (sq. ft.)**	**Minimum Lot Width (ft.)**
7,500	62.5 1	1,000	50% 2	80%	8

TABLE 2: OPEN SPACE AND RECREATION LOT REQUIRMENTS					
Minimum Site Area (sq. ft.)	***Minimum Lot Width (ft.)***	***Minimum Lot Depth (ft.)***	***Maximum Lot Coverage***	***Maximum Impervious Coverage***	***Floor Area Ratio***
N/A	N/A	N/A	N/A	80%	0.3

Figures 2 & 3 below depict the current Future Land Use and Zoning districts within the City.

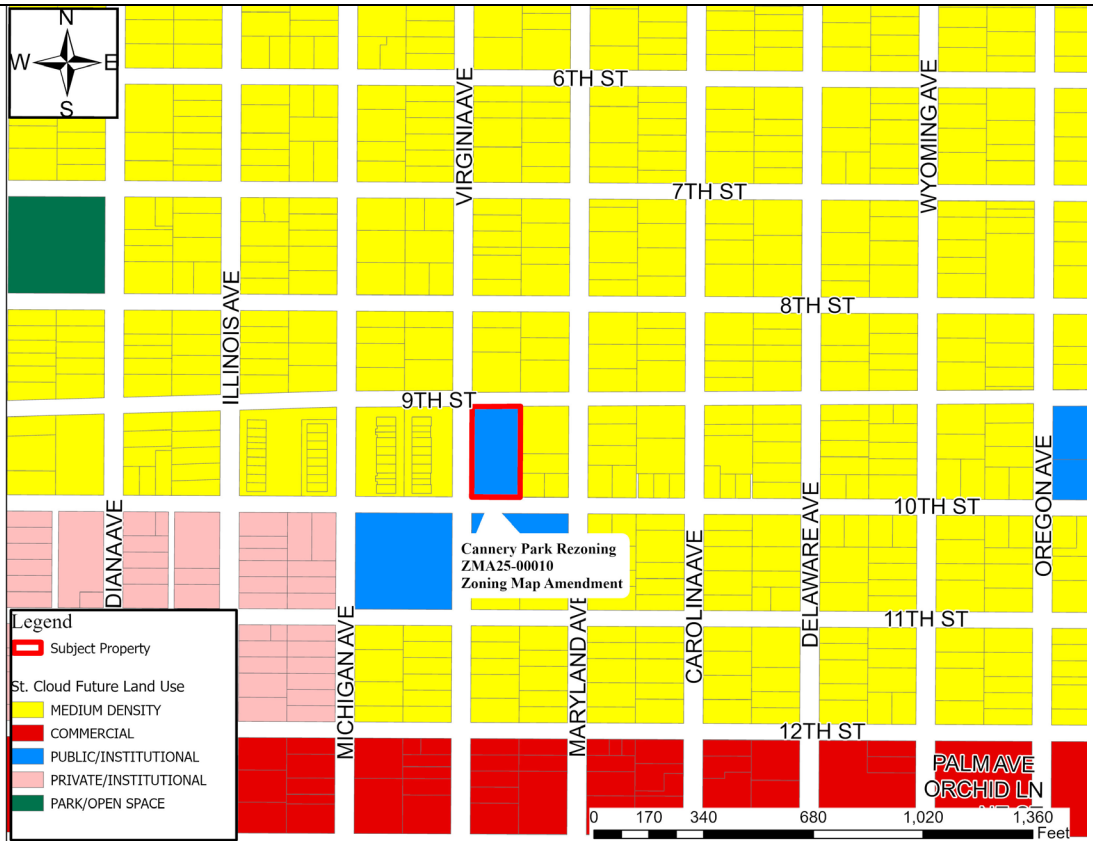


Figure 2 – Future Land Use Map

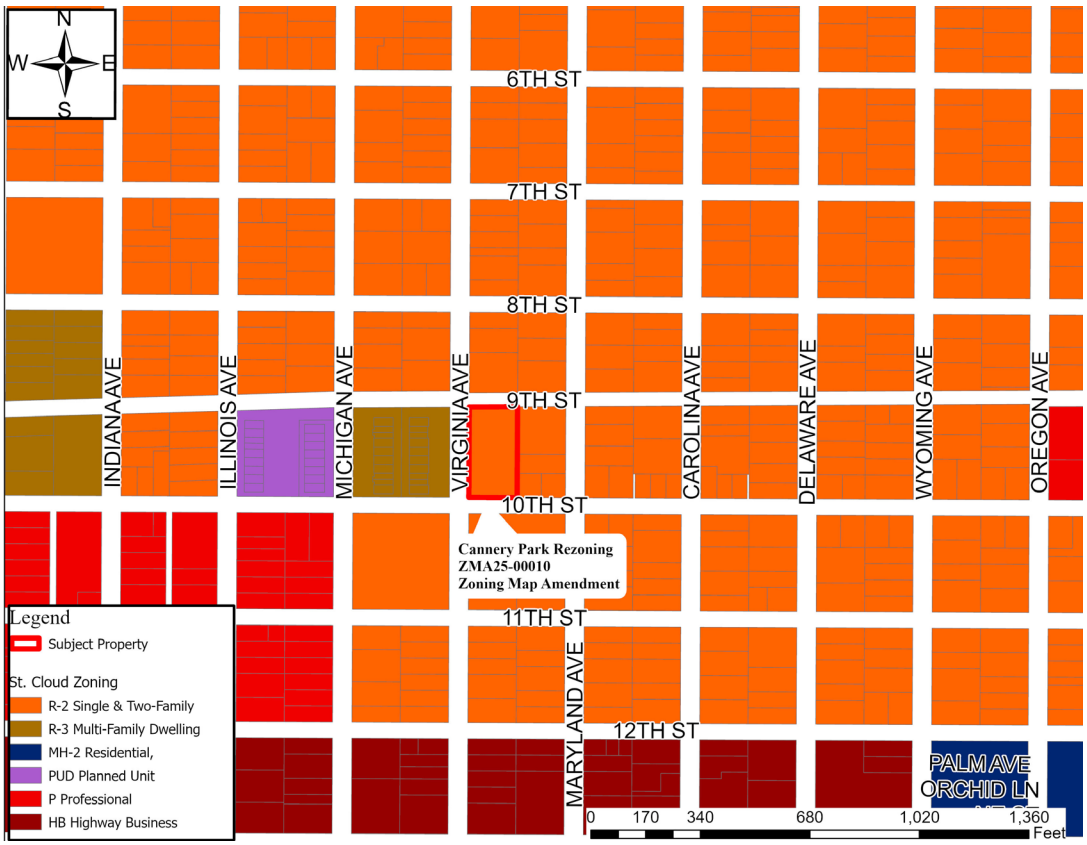


Figure 3 - Zoning Map

Public Notice

Notice of Public Hearing was mailed to property owners within 500 feet of the subject property and was advertised as required by State Statutes. No oral or written comments were received from the public at the time of this report's distribution. Additional public comment may be available at the public hearing.

Findings

Staff has reviewed the applicant's response to the 16 Required Findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant's responses follow the **bolded** LDC language, and staff's comments follow in *italics*:

1. **The proposed change is contrary to the established land use pattern;**

   "No, the proposed rezoning introduces a more inviting land use pattern that will ensure consistency across land use designations and to accurately represent the intended recreational use of park spaces."

   The subject property is currently zoned as "R-2" Single- & Two-Family Dwelling, which is not consistent with the current Future Land Use designation of Park and Open Space. Per Land Development Code Section 3.5.2.A, the R-2 zonings are situated so that they are well served by public and commercial services and have convenient access to thoroughfares and collector streets. The subject properties currently maintain recreational use by the surrounding communities, and are improved with community buildings, picnic tables, sports fields, and playgrounds. Therefore, the proposed change aligns with the established land use pattern by properly updating the City's Zoning map to reflect a zoning designation that aligns with the recreational usage of the properties.

2. **The proposed change would create an isolated district unrelated to the adjacent and nearby districts;**

   "No, the proposed change would not create an isolated district unrelated to adjacent and nearby districts."

   The proposed Zoning Map Amendment to "OR" Open Space and Recreation will not create an isolated district, as it is consistent with the current land use pattern in the area. The referenced parcel currently maintain Park use and serve as a neighborhood park. The proposed change will enhance the existing nature of the area to better meet the surrounding community's recreational needs, while addressing a deficit of "OR" Open Space and Recreation districts within the City.

3. **The proposed change would materially alter the population density pattern and thereby increase or overtax the load on public facilities such as schools, utilities, streets, etc.;**

   "No, the proposed change would not materially alter the population density pattern and thereby increase or overtax the load on public facilities such as schools, utilities, and streets."

   The proposed Zoning Map Amendment application will not impact public school capacity, as dwelling units are not permitted in the "OR" Open Space and Recreation district. Per Land Development Code Section 3.8.1, park uses are permitted by right within the "OR" Open Space and Recreation district. Any future developments or additions to the parks will require a Site Development Plan, which may require additional improvements to existing infrastructure.

4. **Existing district boundaries are illogically drawn in relation to existing conditions on the property proposed for change;**

   "No, existing district boundaries are not illogically drawn in relation to existing conditions on the property proposed for change."

   District boundaries are not illogically drawn but are evolving pursuant to the needs of the city and the Comprehensive Plan, thus allowing for the consideration of this zoning map amendment. Per Land Development Code, Section 3.8.1. A, the open space and recreation district is established to provide for conservation and protection of sensitive lands or other public lands deemed worthy of preservation within the city to ensure that present and future residents of the city can enjoy the benefits of the natural environment of the city.

5. **The proposed change would be contrary to the land use plan and would have an adverse effect on the comprehensive plan;**

   "No, the proposed change would not be contrary to the land use plan and would not have an adverse effect on the comprehensive plan."

   The proposed Zoning Map Amendment aligns with the land use designation of adjacent properties and the surrounding area.

6. **Change or changing conditions make the passage of the proposed amendment necessary;**

   "Yes, existing conditions are changing with the project and amendment is needed."

   The request for a Zoning Map Amendment to "OR" Open Space and Recreation is compatible with the Future Land Use Element request of "Park and Open Space" and is consistent with the developing land use pattern in the area.

7. **The proposed change will adversely influence living conditions in the neighborhood;**

   "No, the proposed change would not be contrary to the land use plan, nor adversely influence living conditions in the neighborhood"

   The proposed Zoning Map Amendment will not negatively impact living conditions in the neighborhood; instead, it will promote and enhance the existing park for the enjoyment and benefit of the surrounding neighborhoods.

8. **The proposed change will create or excessively increase traffic congestion or otherwise affect public safety;**

   "No, the proposed change will not create or excessively increase traffic congestion or otherwise affect public safety."

   The sites currently maintain access from various collectors and arterial streets. No additional development is planned as part of the requested Zoning Map Amendment.

9. **The proposed change will create a drainage problem;**

   "No, the proposed change will not create a drainage problem."

   Pursuant to Chapter 6 of the Land Development Code, water management systems shall be provided for all areas of development and accommodate runoff that flows into or across the development area without additional flooding of any other lands.

10. **The proposed change will seriously reduce light or air to adjacent areas;**

    "No, the proposed change will not seriously reduce light or air to adjacent areas."

The proposed Zoning Map Amendment will not impact light or air in adjacent areas.

11. The proposed change will adversely affect property values in the adjacent area;

"No, the proposed change will not adversely affect property values in the adjacent area."

The proposed Zoning Map Amendment is not expected to negatively impact property values in the adjacent area.

12. The proposed change will be a deterrent to the improvement or development of adjacent property in accordance with existing regulations;

"No, the proposed change will not be a deterrent to the improvement or development of adjacent property in accordance with existing regulations."

The proposed Zoning Map Amendment will encourage the enjoyment of green spaces and recreation uses that will benefit existing and future development of the adjacent properties.

13. The proposed change will constitute a grant of special privilege to an individual owner as contrasted with the public welfare;

"No, the proposed change will not constitute a grant of special privilege to an individual owner as contrasted with the public welfare."

The proposed Zoning Map Amendment does not grant special privilege to an individual owner, developer or contrast with public welfare.

14. There are substantial reasons why a reasonable use of property cannot be accomplished under existing zoning;

"The current zoning of properties does not align with the promotion of open space recreation."

The proposed Zoning Map Amendment will preserve the existing "OR" Open Space and Recreation use within the surrounding area. Enhancing the neighborhood parks will improve the quality of life for local communities.

15. Whether the change suggested is out of scale with the needs of the neighborhood of the city;

"The project is being propelled by the needs of the neighborhood and city, aiming to provide the community with expanded recreational opportunities."

The proposed Zoning Map amendment is not out of scale as the subject property is already developed as a park and would be identified in the Recreation and Open Space Element under Policy 1.1.2 as a Mini Park due to the existing acreage of +/- 0.97.

16. It is impossible to find other adequate sites in the city for the proposed use in districts already zoned for such use.

"The site is presently utilized for recreational activities. The proposed rezoning facilitates the development of additional recreational space to better address the community's needs."

The City has identified areas with a deficit in park acreage, as outlined in the Recreation and Open Space Element of the Comprehensive Plan. Currently, only a limited number of parcels are zoned "OR" Open Space and Recreation, including Hopkins Park, Ralph V. Chisholm Regional Park, and The Ranch. The rezoning of the subject parcel will facilitate an increase in the City's inventory of public park lands.

School Capacity Report

This ZMA has no impact on public school capacity.

Consistency With Strategic Plan Goals:

The proposed zoning map amendment does not meet the intent of the following City of St. Cloud Strategic Goals:

- ***High-Performing Government:*** *Focus on the continuity and sustainability of core public services.*

Staff Recommendation

Staff reviewed this request for a Zoning Map Amendment on or before June 16, 2025, with no objections. Staff recommends **APPROVAL** of Ordinance No. 2025-57 for a Zoning Map Amendment from "R-2" Single & Two-Family Dwelling to "OR" Open Space and Recreation for approximately +/- 0.97 acres of land.

Planning Commission Recommendation

Per section 1.3.7 of the Land Development Code, The City Council shall review the recommendation from the Planning Commission and render a decision based on the recommendation and information presented. The Planning Commission recommendation is based on the 16 required findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant responses to the 16 required findings have been provided as an attachment for the City Council's review.

On August 19, 2025, the Planning Commission – Motion to recommend approval by Marshall. Seconded by Bridgeforth. Passed 4-0

City Council Requested Action

The City Council shall review the recommendation from the Planning Commission and render a decision based on the recommendation and information presented. The Planning Commission recommendation is based on the 16 required findings of Section 1.3.3.C.2.a of the Land Development Code. The applicant responses to the 16 required findings have been provided as an attachment for the City Council's review.

On August 14, 2025 – Motion to approve the First Reading & Introduction by Urban. Seconded by Fletcher. Passed 5-0.

On September 11, 2025- Motion by Fletcher to continue to the October 9th Council meeting. Seconded by Paul. Passed 5-0.

On October 09, 2025- Motion by Urban to continue to the November 13th Council Meeting. Second by Gilbert. Passed 4-0.

Attachments

- Ordinance No. 2025-57
- School Capacity Report
- Business Impact Estimate

RETURN TO:
CITY OF ST. CLOUD
COMMUNTIY DEVELOPMENT DEPARTMENT
1300 9TH STREET
ST. CLOUD, FL 34769

ORDINANCE NO. 2025-57

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, PROVIDING FOR THE ZONING AMENDMENT OF THE ZONING MAP OF THE LAND DEVELOPMENT CODE OF THE CITY OF ST. CLOUD, FLORIDA, SPECIFICALLY CHANGING THE ZONING DESIGNATION OF APPROXIMATELY +/- 0.97 ACRES IDENTIFIED AS CANNERY PARK REZONING, PROJECT #ZMA25-00010, FROM "R-2" SINGLE & TWO-FAMILY DWELLING TO "OR" OPEN SPACE/RECREATION LOCATED AT 901 VIRGINIA AVENUE, PROVIDING FOR ENTERING THE DESIGNATION ON THE OFFICIAL ZONING MAP, FILING OF THE PLANNING COMMISSION RECOMMENDATION AND PROOF OF PUBLICATION, SEVERABILITY, AND EFFECTIVE DATE.

WHEREAS, zoning districts are required to be consistent with Comprehensive Plan of the City of St. Cloud; and,

WHEREAS, the proposed zoning is consistent with the proposed Future Land Use designation of "Park and Open Space"; and,

WHEREAS, the property described below is less than five percent (5%) of the total land area of the City of St. Cloud; and,

WHEREAS, the City Council has received the recommendation of the Planning Commission dated August 19, 2025; and,

WHEREAS, the City Council has held a Public Hearing on this matter after public notice has been provided, as required by law; and,

WHEREAS, it is in the best interest of the City of St. Cloud and its citizens that the proposed rezoning be approved.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of St. Cloud, Florida, as follows:

SECTION 1:

That Ordinance No. 87-HH of the City of St. Cloud, Florida, passed and adopted October 1, 1987, and any amendments to the ordinance, being the Land Development Code of the City of St. Cloud, Florida, is hereby amended to include and designate on the Official Zoning Map a "Open Space

and Recreation" zoning district classification for the property described below and as shown on Exhibit "A":

Parcel: 01-26-30-0001-0122-0080

Legal Description:
THAT PART OF THE ABANDONED RIGHT OF WAY OF THE KISSIMMEE-NARCOOSSEE BRANCH OF THE ATLANTIC COAST LINE RAILROAD COMPANY, ACCORDING TO THE PLAT OF SAID ABANDONED RIGHT OF WAY RECORDED IN DEED BOOK 109, PAGE 1, PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA, INSOFAR AS SAID ABANDONED RIGHT OF WAY ABUTTS AND/OR TRAVERSES ANY PART OF THE FOLLOWING LAND IN THE TOWN OF ST. CLOUD, FLORIDA ACCORDING TO THE OFFICIAL PLAT OF SAID TOWN OF ST. CLOUD, FLORIDA, ACCORDING TO THE OFFICIAL PLAT OF SAID TOWN ON FILE IN THE OFFICE OF THE CLERK OF THE CIRCUIT COURT OF OSCEOLA COUNTY, FLORIDA, TOGETHER WITH: LOTS 8 THROUGH 14, BLOCK 122, SEMINOLELAND & INVESTMENT CO'S (INCORPORATED) MAP OF TOWN OF ST. CLOUD, RECORDED IN PLAT BOOK 8, PAGES 33 & 34, PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA.

Containing +/- 0.97 acres, more or less.

SECTION 2:

The property is rezoned to "OR" Open Space and Recreation, making applicable all provisions of the Land Development Code of the City of St. Cloud, Florida.

SECTION 3:

The City Manager or his/her designee is authorized and directed to promptly enter such change on the Official Zoning Map.

SECTION 4:

Upon adoption of this ordinance, the Planning Commission recommendation and "Proof of Publication" of the required Public Hearing notices shall be filed in the Community Development Department.

SECTION 5:

If any section or portion of a section of this ordinance proves to be invalid, unlawful or unconstitutional, it shall not be held to impair the validity, force or effect of any other section or part of this ordinance.

SECTION 6:

The City Clerk, after consultation with the City Attorney, is authorized to correct scrivener's errors found by filing a corrected copy of this ordinance in the official records of the City.

SECTION 7:

Effective Date. This ordinance shall become effective upon the effective date of Ordinance No. 2024-50 (CPA24-00007) as provided by law.

First Reading on the 14th day of August, 2025.

Final Reading on the 13th day of November, 2025.

CITY OF ST. CLOUD

_____

Christian B. Robertson, Mayor

ATTEST:

_____

Ivy Llauro, City Clerk

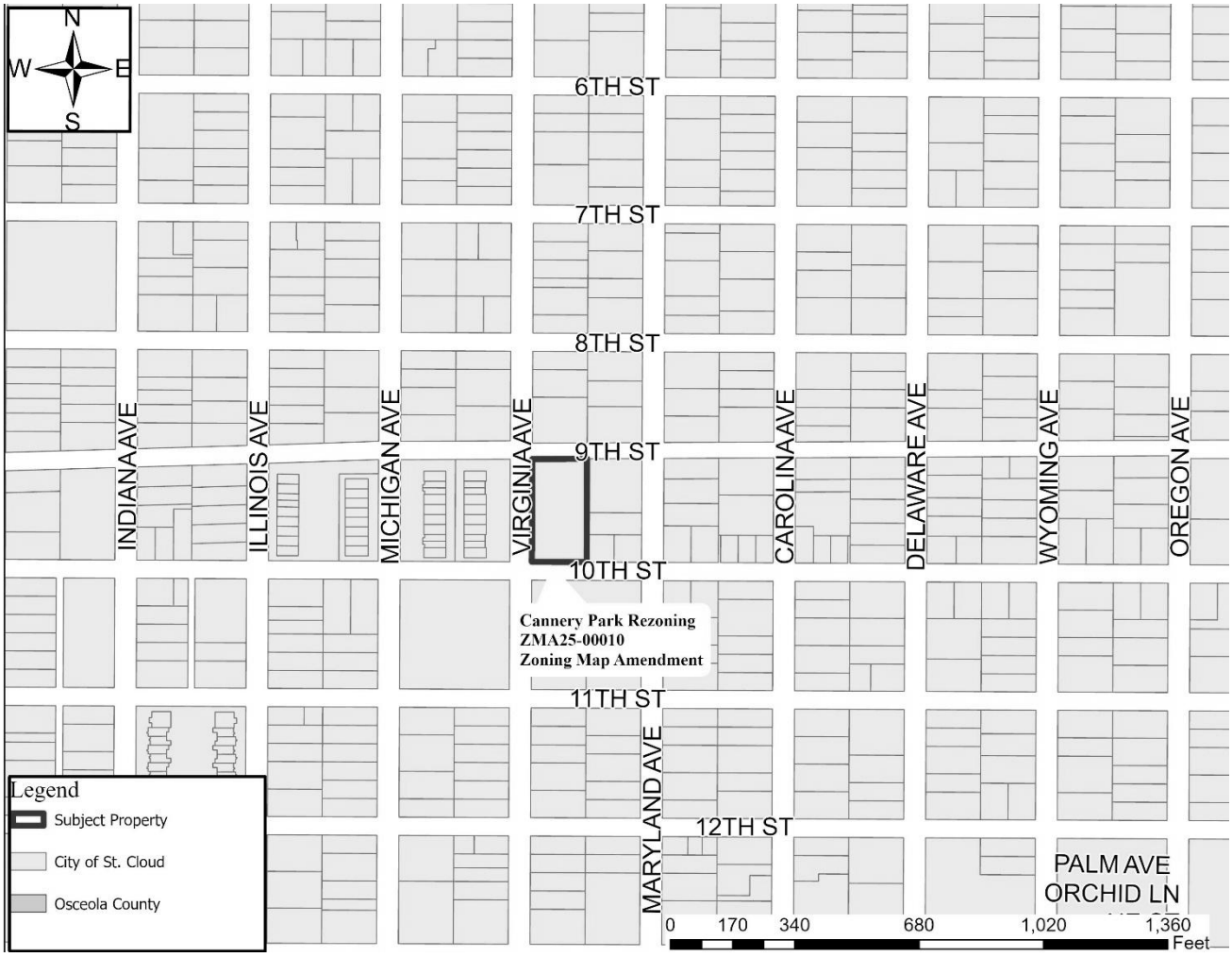
LEGAL IN FORM AND VALID IF ADOPTED:
de Beaubien, Simmons, Knight, Mantzaris & Neal, LLP

_____

Daniel F. Mantzaris, City Attorney

Pursuant to Section 695.26 (3) (f), this instrument exempt from Chapter 695, F.S.: Prepared by and return to a Public Official: City Manager, City of St. Cloud; 1300 9th Street; St. Cloud, Florida 34769

EXHIBIT "A"



PARCEL ID NO(S).
01-26-30-0001-0122-0080

THE SCHOOL DISTRICT OF OSCEOLA COUNTY, FLORIDA
PLANNING SERVICES DEPARTMENT
SCHOOL CAPACITY REPORT

SDOC#: 2024/25-0168 DRC#: ZMA25-00006

PROJECT NAME: City Parks Rezoning

PROJECT LOCATION: Multiple Addresses, see list

COMMENTS DUE DATE: 6.2.25

Current FLU: Multi
Requested FLU: N/A

Current Zoning: R-2/P/A
Requested Zoning: OR

PID: 01-26-30-0001-0122-0080
10-26-30-00U0-0030-0000
02-26-30-00U0-0050-0000
01-26-30-0001-0417-0010
02-26-30-00U0-0050-0000
01-26-30-0001-0393-0010+++

This ZMA application for the rezoning of city parks has no impact on public school capacity.

BUSINESS IMPACT ESTIMATE
ORDINANCE NO. 2025-57

TO: Mayor Robertson and Council Members

FROM: Ralph Keith Jr., Associate Planner

THRU: Melissa Dunklin, CPM, Community Development Director

DATE: October 3rd, 2025

SUBJECT: Ordinance No. 2025-57 - Business Impact Estimate

Section 166.041, *Florida Statutes*, effective July 1, 2023, requires the City prepare (or cause to be prepared) a business impact estimate prior to final consideration of an ordinance, subject to exemptions noted in the Law. The new law requires that the business impact estimate be posted on the City's website at the time of the published notice of the City Council's final consideration of the ordinance, or ten (10) days prior to the adoption public hearing, whichever is longer. Ordinance No. 2025-57 is proposed to be adopted by the City on November 13, 2025, and is subject to this new requirement. Following are the categories required to be addressed for the proposed ordinance based on the new legislation:

1. **Summary of proposed Ordinance No.: 2025-57.**

The purpose of this ordinance is to rezone City-owned property to better reflect its existing recreational use and buildings. Ordinance No. 2025-57 reflects the City of St. Cloud's commitment to enhancing community engagement, promoting wellness, supporting economic growth, and ensuring long-term sustainability by providing modern recreational facilities that improve the quality of life for residents.

2. **Estimate of the direct economic impact of the proposed ordinance on private, for-profit businesses in the city**

   a. **Estimate of direct compliance costs that businesses may reasonably incur if the ordinance is enacted.**

The proposed ordinance will have no effect to cost on any business located within the City.

   b. **Identification of any new charge or fee on businesses subject to the proposed ordinance or for which businesses will be financially responsible.**

The proposed ordinance does not identify any new charges or fees on businesses.

c. An estimate of the City's regulatory costs, including an estimate of revenues from any new charges or fees that will be imposed on businesses to cover such costs.

The City will not collect any regulatory cost should this ordinance be adopted; as no new charges or fees will be imposed on businesses by the City.

3. A good faith estimates of the number of businesses likely to be impacted by the ordinance.

Adoption of the proposed ordinance will have no negative impact on businesses.

4. Any additional information the board determines may be useful.

The approval of Ordinance 2025-57 will realign the City's zoning map to reflect consistency with the Future Land Use designation for the City's parks, facilitating the approval of recreational and community-oriented uses.

Meeting: November 13, 2025

Agenda Item Type: Council Action Resolution No. 2025-130R - Special Event Fee Schedule

Park & Recreation Agenda Item:
Resolution 2025-130R, a resolution of the City Council of the City of St. Cloud, Florida amending the Special Event Fee Schedule for events held on City-regulated property in the City of St Cloud.

Strategic Key Focus Areas:
High-Performing Government

Background Information:
The revisions reflect operational and procedural changes resulting from updates to the Special Event Ordinance and the implementation of the City's new OpenGov permitting software.

SUMMARY OF CHANGES:

Item	Previous	Updated	Notes
Major Special Event Permit Application Fee	$315	$315	Include the word "application" to ensure consistency with the language in the Special Event Ordinance.
Minor Special Event	$95	0	The "Minor Special Event" category was removed in accordance with revisions to the Special Event Ordinance.
Lakefront Trailer Boat Ramp Parking Lot Closure	0	$282	Added to recover parking fees when the boat ramp lot is closed for special events (46 spaces × $6 per space).
Soft Barricades	$10 for 10 per day	$1 ea., Minimum of 10	The price per barricade remains the same; only the collection process was updated to align with the City's new OpenGov permitting software.

Legal Authority:
City Code, Part II, Chapter 30, Article II

Budget and Recommendation:
No cost associated with this item.
Staff recommends **APPROVAL** of Resolution 2025-130R.

Finance Director's Comments:
N/A

Procurement Director's Comments:
N/A

City Manager's Comments:
City Manager recommends approval

City Council Action:
Final Action 11/20/25

Attachments:
1. 2025-130R - Special Event Fee Schedule staff report 10-23-25
2. 2025-130R - Special Event fee schedule resolution 10-21-25 (final)
3. 2025-130R- Special Event fee schedule (final) 10-21-25
4. 2025-130R - Special Event fee schedule resolution 10-21-25 (mark-up)
5. 2025-130R- Special Event fee schedule (mark-up) 10-21-25

MEMORANDUM REPORT
FOR CITY COUNCIL
November 13, 2025

To: Mayor Robertson and Council Members

From: Stephanie Holtkamp, Parks and Recreation Director

Subject: Resolution No. 2025-130R

Date: October 23, 2025

REQUEST:
Staff is requesting approval for revisions to the City's Special Event Fee Schedule to reflect updates in event-related charges, operational labor, and permit processes to align with the update Special Event Ordinance

BACKGROUND:
The revisions reflect operational and procedural changes resulting from updates to the Special Event Ordinance and the implementation of the City's new OpenGov permitting software.

SUMMARY OF CHANGES:

Item	Previous	Updated	Notes
Major Special Event Permit Application Fee	$315	$315	Include the word "application" to ensure consistency with the language in the Special Event Ordinance.
Minor Special Event	$95	0	The "Minor Special Event" category was removed in accordance with revisions to the Special Event Ordinance.
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Soft Barricades	$10 for 10 per day	$1 ea., Minimum of 10	The price per barricade remains the same; only the collection process was updated to align with the City's new OpenGov permitting software.

STRATEGIC PLAN GOALS:
This item is consistent with the following City of St. Cloud Strategic Plan Goals:

- High-Performing Government
  Focus on the continuity and sustainability of core public services.

COST: No Cost

STAFF RECOMMENDATION: Staff recommends **APPROVAL** Resolution No. 2025-130R.

Attachment: Resolution No. 2025-130R.

RESOLUTION NO. 2025-130R

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA AMENDING THE SPECIAL EVENT FEE SCHEDULE FOR EVENTS HELD ON CITY-REGULATED PROPERTY IN THE CITY OF ST. CLOUD.

WHEREAS, onMay 8, 2025, the City Council of St. Cloud approved Resolution2025-065R, adopting a Special Event Fee Schedule for events held on city-regulated property; and

WHEREAS, the Special Event Fee Schedule was established to regulate and manage special events, ensuring that the necessary resources, such as equipment, personnel, and public safety services, are properly allocated for the successful execution of such events; and

WHEREAS, over the past several years, the costs associated with providing these services, including inflation, higher personnel costs, and rising expenses related to equipment maintenance and transportation, have increased significantly; and

WHEREAS, adjustments to the Special Event Fee Schedule will allow the City of St. Cloud to maintain fiscal responsibility while continuing to provide high-quality event support without placing an undue financial burden on the general fund or taxpayers; and

WHEREAS, it is in the best interest of the City of St. Cloud to ensure that event organizers contribute fairly to the costs associated with event-related services and resources.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of St. Cloud, Florida:

1. The Special Event Fee Schedule adopted by Resolution 2025-130R is hereby amended as set forth in Exhibit A, attached hereto and incorporated herein by this reference.
2. The revised Special Event Fee Schedule shall become effective November 14, 2025 upon adoption of this Resolution and shall apply to all event applications submitted on or after the effective date.
3. City staff is hereby directed to update all relevant public materials, websites, and application forms to reflect the amended fee schedule.
4. The City Manager, or their designee, is authorized to take all administrative actions necessary to implement and enforce the provisions of the revised Special Event Fee Schedule.
5. All resolutions or parts of resolutions in conflict herewith are hereby repealed to the extent of such conflict.

PASSED AND ADOPTED by the City Council of the City of St. Cloud, Florida, this 13th day of November 2025.

City of St. Cloud

_____
Christian B. Robertson, Mayor

ATTEST:

_____
Ivy Llauro, City Clerk

LEGAL IN FORM AND VALID IF ADOPTED
deBeaubien, Simmons, Knight, Mantzaris & Neal

_____
Daniel Mantzaris, City Attorney

EXHIBIT "A" - City of St. Cloud Special Event Fee Schedule - Resolution 2025-130R

Equipment/Vehicles

Item Description	Item Fee	Unit	Category	Dept	Notes
Special Event Permit Application Fee	$315.00	per request	Permit	P&R	
Lakefront Trailer Boat Ramp Parking Lot Closure	$282.00	per request	Misc.	P&R	46 parking spaces x $6.00 a space
Small Stage Labor Fee	$80 x 4 hours (set up and breakdown time)	per request	Equipment	P&R	
Large Stage Labor Fee	$160 x 6 hours* + event time *set up and breakdown time	per request	Equipment	P&R	
20’ x 40’ Tents	$180.00	per tent	Equipment	P&R	Equipment fees include delivery and pick-up by City staff 4 hour minimum
Mobile Light Tower	$60.00	per tower	Equipment	P&R	
Mobile Bleacher	$100.00	per each	Equipment	P&R	
Portable Stage	$100.00	per each	Equipment	P&R	
Parade Fencing	$50.00	per each	Equipment	P&R	
Event Trailer/Equipment (tables & chairs)	$75.00	per each	Equipment	P&R	
Event Trash Receptacles	$15.00	per cart	Equipment	P&R	
Event Dumpster	$104.00	per each	Equipment	PS	
Soft Barricades	$1.00	Each/per day	Equipment	PS	Minimum of 10, plus $34 an hour at a 4 hour minimum /set up and break down
Hard / Concrete Barricades	$27.00	per each / per day	Equipment	PS	plus $68 an hour at a 4 hour minimum / set up and break down
Barricade / Fencing	$15.00	per 10 / per day	Equipment	PS	plus $34 an hour at a 4 hour minimum /set up and break down
Electronic Message Board	$35.00	per day	Equipment	PS	plus $34 an hour at a 4 hour minimum /set up and break down
Street Sweeper	$514.00	per day	Equipment	PS	plus $34 an hour at a 4 hour minimum /set up and break down
Electrical Meter	$25.00	per meter / per day	Equipment	PS	

Public Safety Equipment

PD Light Tower	$60.00	per hour	Equipment	PD	1 officer required, staffing costs not included
PD Officers on Bicycles	$10.00	per event	Equipment	PD	
PD Utility Trailer	$7.00	per hour	Vehicles	PD	
Police Command Vehicle	$25.00	per hour	Vehicles	PD	
Police Vehicles (PD cars, SUV, PU, MC, ATV)	$5.00	per hour	Vehicles	PD	
Police Boat	$30.93	per hour	Vehicles	PD	2 officers required, staffing costs not included
SWAT Transport Vehicle (Big Dog)	$50.00	per hour	Vehicles	PD	1 officer required, staffing costs not included
Aerial Truck	$220.55	per hour	Vehicles	FD	2 hour minimum. Vehicles and staffing with be allocated at the discretion of the fire department based on event accessibility and expected attendance.
Ambulance	$48.32	per hour	Vehicles	FD	
EMS / ATV	$23.74	per hour	Vehicles	FD	
Brush Truck	$45.53	per hour	Vehicles	FD	
Fire Engine	$173.47	per hour	Vehicles	FD	
Utility Vehicle	$31.81	per hour	Vehicles	FD	
Command Vehicle	$31.81	per hour	Vehicles	FD	
EMS Bikes	$10.00	per event	Vehicles	FD	
Rescue Boat	$30.93	per hour	Vehicles	FD	

Personnel

Position Description	Regular Rate	Holiday Rate	Unit	Category	Dept	Notes
Additional Custodial Service	$30.00	$40.00	per hour	Personnel	P&R	2 hour minimum
AV/Media ½ Day Rate (0-3 hours)	$250.00		per each	Personnel	Media	per personnel / equipment costs included
AV/Media Full Day Rate (3-6 hours)	$500.00		per each	Personnel	Media	
AV/Media Rate Hours after 6 hours	$100.00		per hour	Personnel	Media	
AV/Media Postproduction Rate	$75.00		per hour	Personnel	Media	
Video / Audio Editing	$30.00		per hour	Personnel	Media	
FD Chief Officer	$93.00		per hour	Personnel	FD	

EXHIBIT "A" - City of St. Cloud Special Event Fee Schedule - Resolution 2025-130R

FD Captain	$86.00		per hour	Personnel	FD	2 hour minimum. Vehicles and staffing will be allocated at the discretion of the fire department based on event accessibility and expected attendance.
FD Lieutenant	$78.00		per hour	Personnel	FD	
FD Inspector	$45.50		per hour	Personnel	FD	
FE Engineer	$71.50		per hour	Personnel	FD	
Paramedic	$64.50		per hour	Personnel	FD	
EMT	$57.00		per hour	Personnel	FD	
Crossing Guards	$20.00	$25.00	per hour	Personnel	PD	More than 5 officers requires a sergeant. Minimum 4 hours in addition to event times.
PD Officer	$50.00	$64.00	per hour	Personnel	PD	
PD Sergeant	$57.00	$71.00	per hour	Personnel	PD	
PD Lieutenant	$79.00	$93.00	per hour	Personnel	PD	
PD Captain	$85.00	$100.00	per hour	Personnel	PD	
PD Deputy Chief	$93.00	$107.00	per hour	Personnel	PD	
Dispatcher	$31.00	$44.00	per hour	Personnel	PD	
Special Events Manager	$50.00	$65.00	per hour	Personnel	P&R	2 hour minimum
Special Event Coordinator	$40.00	$50.00	per hour	Personnel	P&R	
Grounds Maintenance Worker - Parks FT	$30.00	$40.00	per hour	Personnel	P&R	
Recreational Facility Leader	$30.00	$40.00	per hour	Personnel	P&R	Facility Attendant: 2 personnel are required for events serving alcohol 4 hour min. per staff 1:75 staffing ratio
Alcohol Permit - P&Z Review	$80.00		per each	Permitting	P&Z	

Parks Recreation Special Events and Program Fees

Programs/Activites							
Special Event/ Program	**INELIGIBLE FOR FEE WAIVER**	**Resident/ Business**	**Non-resident**	**Unit**	**Category**	**Dept**	**Notes**
Kids Night Out		$15.00	$20.00	per event	Program	P&R	
Creative Moment		$3.00	$4.00	per class	Program	P&R	
Creative Nature		$6.00	$7.00	per class	Program	P&R	
Creative Movement Punch Pass		$30.00	$40.00	10 classes	Program	P&R	
Peghorn Trail of Terror		$5.00	$5.00		Program	P&R	
Father Daughter Dance		$10.00	$10.00	event	Program	P&R	
Little Ladies Tea Party		$10.00	$10.00	event	Program	P&R	
Father Son Fishing Tournament		$7.50	$7.50	event	Program	P&R	
Cookies with Santa		$15.00	$15.00	event	Program	P&R	
Movie at the Lakefront		FREE	FREE		Program	P&R	
Home School PE		$4.00	$5.00		Program	P&R	
Eggstravaganza		$5.00	$5.00		Program	P&R	
Geo Caching Egg Hunt		$5.00	$5.00		Program	P&R	
Munchkin Adventures		$5.00	$5.00		Program	P&R	
Open Gym Membership		$10.00	$20.00	month pass	Program	P&R	
Open Gym Daily Pass		$3.00	$3.00		Program	P&R	
Touch-A-Truck		$5.00	$5.00		Program	P&R	
Mother & Son Game Night		$7.50	$7.50	per person	Program	P&R	
Midnight Basketball		FREE	FREE		Program	P&R	
Youth Basketball Clinic		$30.00	$40.00	day	Program	P&R	
Youth Basketball League		$60.00	$70.00	season	Program	P&R	
Tuning Toning Talking		$1.00	$2.00	class	Program	P&R	
Tuning Toning Talking Punch Card		$20.00	$30.00	25 classes	Program	P&R	
Water Fitness		$2.50	$2.50	class	Program	P&R	
RAYS		$50.00	$60.00	month pass	Program	P&R	
Splash for Our Kids Safety		FREE	FREE		Program	P&R	
Iddy Biddy Pool Party		$4.00	$5.00	event	Program	P&R	
Splish, Splas Bash		FREE	FREE		Program	P&R	
Splash with Santa		$4.00	$5.00		Program	P&R	
Aquatic Teen Challenge		$60.00	$70.00	month pass	Program	P&R	
Apprentice Lifeguard- Spring		$50.00	$60.00	session	Program	P&R	
Apprentice Lifeguard- Summer		$85.00	$95.00	session	Program	P&R	
Nature Tour		$5.00	$5.00	child/tour	Program	P&R	
Urban Gardenista Program		$8.00	$8.00	person	Program	P&R	
Get in the Dirt With Kids Gardening		$5.00	$6.00	per child	Program	P&R	
Gifts from the Garden Class		$8.00	$8.00	person	Program	P&R	
Pickleball		$1.00	$2.00	person	Program	P&R	
Adult Men's Basketball League		$300.00		per team	Program	P&R	
Adult Flag Football League		$375.00		per team	Program	P&R	
Co-ED Softball League		$350.00		per team	Program	P&R	
Men's Softball League		$350.00		per team	Program	P&R	
Co-ED Adult Kickball		$275.00		per team	Program	P&R	
School's Out, Fun's In (Day Camp)		$20.00	$30.00	per day	Program	P&R	
Spring Break Camp		$60.00	$70.00	per week	Program	P&R	
Summer Camp		$60.00	$70.00	per week	Program	P&R	
Specialty Camp		$50.00	$70.00	per week	Program	P&R	

Parks Recreation Special Events and Program Fees

Chris Lyle Aquatic Center Swim Programs/Activities							
Activity		**Resident**	**Non Resident**				
OPEN SWIM FEES:							
Daily Fee		$3.00	$4.00	All Ages			
SC Employee/ Retired City Employees		Free					
Punch Pass							
10 Punch Pass		$25.00	$35.00				
20 Punch Pass		$40.00	$50.00				
ANNUAL POOL PASS:							
Individual		$60.00	$70.00				
Senior Citizen (60 and up)		$40.00	$50.00				
Handicapped		$40.00	$50.00				
Senior or Handicapped w/ Caregiver		$50.00	$60.00				
Family of 4 w/ 1 guest		$100.00	$110.00				
Additional Family Members		$10.00	$20.00	per person			
SWIM LESSONS:		**Resident/Busi**	**Non- Resident**				
Group lessons per session							
1/2 hour session		$35.00	$45.00	per person			
1 hour session		$45.00	$55.00	per person			
		Resident/ Business					
Private & Semi-Private Lessons		1 Lesson	6-Lesson Session		***pp = per person**		
1 person in class		$40.00*	$180.00*	Hour			
2 people in class		$30.00*	$135.00*	Hour			
3 people in class		$25.00*	$112.50*	Hour			
4 people in class		$20.00*	$90.00*	Hour			
5 people in class		$17.50*	$78.75*	Hour			
		Non-Resident			***pp=per person**		
		1 Lesson	6- lesson Session				
Private & Semi-Private Lessons		$50.00*	$225.00*	Hour			
1 person in class		$40.00*	$180.00*	Hour			
2 people in class		$35.00*	$157.50*	Hour			
3 people in class		$30.00*	$135.00*	Hour			
4 people in class		$27.50*	$123.75*	Hour			
5 people in class							
Swim Teams/ Dive Teams/ Water Polo		$40.00	$40.00	per person/per season			

RESOLUTION NO. ~~2025-065R~~2025-130R

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA AMENDING THE SPECIAL EVENT FEE SCHEDULE FOR EVENTS HELD ON CITY-REGULATED PROPERTY IN THE CITY OF ST. CLOUD.

WHEREAS, on ~~March 13, 2025~~May 8, 2025, the City Council of St. Cloud approved Resolution ~~2025-018R~~2025-065R, adopting a Special Event Fee Schedule for events held on city-regulated property; and

WHEREAS, the Special Event Fee Schedule was established to regulate and manage special events, ensuring that the necessary resources, such as equipment, personnel, and public safety services, are properly allocated for the successful execution of such events; and

WHEREAS, over the past several years, the costs associated with providing these services, including inflation, higher personnel costs, and rising expenses related to equipment maintenance and transportation, have increased significantly; and

~~WHEREAS, a review of the current fee schedule has determined that an increase in certain event-related fees is necessary to ensure that the fees charged adequately cover the growing costs associated with the resources required for successful event execution; and~~

WHEREAS, adjustments to the Special Event Fee Schedule will allow the City of St. Cloud to maintain fiscal responsibility while continuing to provide high-quality event support without placing an undue financial burden on the general fund or taxpayers; and

WHEREAS, it is in the best interest of the City of St. Cloud to ensure that event organizers contribute fairly to the costs associated with event-related services and resources.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of St. Cloud, Florida:

1. The Special Event Fee Schedule adopted by Resolution ~~2025-065R~~2025-130R is hereby amended as set forth in Exhibit A, attached hereto and incorporated herein by this reference.
2. The revised Special Event Fee Schedule shall become effective ~~May 9, 2025~~ November 14, 2025 upon adoption of this Resolution and shall apply to all event applications submitted on or after the effective date.
3. City staff is hereby directed to update all relevant public materials, websites, and application forms to reflect the amended fee schedule.
4. The City Manager, or their designee, is authorized to take all administrative actions necessary to implement and enforce the provisions of the revised Special Event Fee Schedule.
5. All resolutions or parts of resolutions in conflict herewith are hereby repealed to the extent of such conflict.

PASSED AND ADOPTED by the City Council of the City of St. Cloud, Florida, this ~~8th~~13th day of ~~May~~ November 2025.

City of St. Cloud

_____
Christian B. Robertson, Mayor

ATTEST:

_____
Ivy Llauro, City Clerk

LEGAL IN FORM AND VALID IF ADOPTED
deBeaubien, Simmons, Knight, Mantzaris & Neal

_____
Daniel Mantzaris, City Attorney

EXHIBIT "A" - City of St. Cloud Special Event Fee Schedule - Resolution ~~2025-065R~~ 2025-130R

Equipment/Vehicles

Item Description	Item Fee	Unit	Category	Dept	Notes
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Event Dumpster	$104.00	per each	Equipment	PS	
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Personnel						
Position Description	**Regular Rate**	**Holiday Rate**	**Unit**	**Category**	**Dept**	**Notes**
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PD Lieutenant	$79.00	$93.00	per hour	Personnel	PD	
PD Captain	$85.00	$100.00	per hour	Personnel	PD	
PD Deputy Chief	$93.00	$107.00	per hour	Personnel	PD	
Dispatcher	$31.00	$44.00	per hour	Personnel	PD	
Special Events Manager	$50.00	$65.00	per hour	Personnel	P&R	2 hour minimum
Special Event Coordinator	$40.00	$50.00	per hour	Personnel	P&R	
Grounds Maintenance Worker - Parks FT	$30.00	$40.00	per hour	Personnel	P&R	
Recreational Facility Leader	$30.00	$40.00	per hour	Personnel	P&R	Facility Attendant: 2 personnel are required for events serving alcohol 4 hour min. per staff 1:75 staffing ratio
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Parks Recreation Special Events and Program Fees

Programs/Activites							
Special Event/ Program	**INELIGIBLE FOR FEE WAIVER**	**Resident/ Business**	**Non-resident**	**Unit**	**Category**	**Dept**	**Notes**
Kids Night Out		$15.00	$20.00	per event	Program	P&R	
Creative Moment		$3.00	$4.00	per class	Program	P&R	
Creative Nature		$6.00	$7.00	per class	Program	P&R	
Creative Movement Punch Pass		$30.00	$40.00	10 classes	Program	P&R	
Peghorn Trail of Terror		$5.00	$5.00		Program	P&R	
Father Daughter Dance		$10.00	$10.00	event	Program	P&R	
Little Ladies Tea Party		$10.00	$10.00	event	Program	P&R	
Father Son Fishing Tournament		$7.50	$7.50	event	Program	P&R	
Cookies with Santa		$15.00	$15.00	event	Program	P&R	
Movie at the Lakefront		FREE	FREE		Program	P&R	
Home School PE		$4.00	$5.00		Program	P&R	
Eggstravaganza		$5.00	$5.00		Program	P&R	
Geo Caching Egg Hunt		$5.00	$5.00		Program	P&R	
Munchkin Adventures		$5.00	$5.00		Program	P&R	
Open Gym Membership		$10.00	$20.00	month pass	Program	P&R	
Open Gym Daily Pass		$3.00	$3.00		Program	P&R	
Touch-A-Truck		$5.00	$5.00		Program	P&R	
Mother & Son Game Night		$7.50	$7.50	per person	Program	P&R	
Midnight Basketball		FREE	FREE		Program	P&R	
Youth Basketball Clinic		$30.00	$40.00	day	Program	P&R	
Youth Basketball League		$60.00	$70.00	season	Program	P&R	
Tuning Toning Talking		$1.00	$2.00	class	Program	P&R	
Tuning Toning Talking Punch Card		$20.00	$30.00	25 classes	Program	P&R	
Water Fitness		$2.50	$2.50	class	Program	P&R	
RAYS		$50.00	$60.00	month pass	Program	P&R	
Splash for Our Kids Safety		FREE	FREE		Program	P&R	
Iddy Biddy Pool Party		$4.00	$5.00	event	Program	P&R	
Splish, Splas Bash		FREE	FREE		Program	P&R	
Splash with Santa		$4.00	$5.00		Program	P&R	
Aquatic Teen Challenge		$60.00	$70.00	month pass	Program	P&R	
Apprentice Lifeguard- Spring		$50.00	$60.00	session	Program	P&R	
Apprentice Lifeguard- Summer		$85.00	$95.00	session	Program	P&R	
Nature Tour		$5.00	$5.00	child/tour	Program	P&R	
Urban Gardenista Program		$8.00	$8.00	person	Program	P&R	
Get in the Dirt With Kids Gardening		$5.00	$6.00	per child	Program	P&R	
Gifts from the Garden Class		$8.00	$8.00	person	Program	P&R	
Pickleball		$1.00	$2.00	person	Program	P&R	
Adult Men's Basketball League		$300.00		per team	Program	P&R	
Adult Flag Football League		$375.00		per team	Program	P&R	
Co-ED Softball League		$350.00		per team	Program	P&R	
Men's Softball League		$350.00		per team	Program	P&R	
Co-ED Adult Kickball		$275.00		per team	Program	P&R	
School's Out, Fun's In (Day Camp)		$20.00	$30.00	per day	Program	P&R	
Spring Break Camp		$60.00	$70.00	per week	Program	P&R	
Summer Camp		$60.00	$70.00	per week	Program	P&R	
Specialty Camp		$50.00	$70.00	per week	Program	P&R	

Parks Recreation Special Events and Program Fees

Chris Lyle Aquatic Center Swim Programs/Activities							
Activity		**Resident**	**Non Resident**				
OPEN SWIM FEES:							
Daily Fee		$3.00	$4.00	All Ages			
SC Employee/ Retired City Employees		Free					
Punch Pass							
10 Punch Pass		$25.00	$35.00				
20 Punch Pass		$40.00	$50.00				
ANNUAL POOL PASS:							
Individual		$60.00	$70.00				
Senior Citizen (60 and up)		$40.00	$50.00				
Handicapped		$40.00	$50.00				
Senior or Handicapped w/ Caregiver		$50.00	$60.00				
Family of 4 w/ 1 guest		$100.00	$110.00				
Additional Family Members		$10.00	$20.00	per person			
SWIM LESSONS:		**Resident/Busi**	**Non- Resident**				
Group lessons per session							
1/2 hour session		$35.00	$45.00	per person			
1 hour session		$45.00	$55.00	per person			
		Resident/ Business					
Private & Semi-Private Lessons		1 Lesson	6-Lesson Session		***pp = per person**		
1 person in class		$40.00*	$180.00*	Hour			
2 people in class		$30.00*	$135.00*	Hour			
3 people in class		$25.00*	$112.50*	Hour			
4 people in class		$20.00*	$90.00*	Hour			
5 people in class		$17.50*	$78.75*	Hour			
		Non-Resident			***pp=per person**		
		1 Lesson	6- lesson Session				
Private & Semi-Private Lessons		$50.00*	$225.00*	Hour			
1 person in class		$40.00*	$180.00*	Hour			
2 people in class		$35.00*	$157.50*	Hour			
3 people in class		$30.00*	$135.00*	Hour			
4 people in class		$27.50*	$123.75*	Hour			
5 people in class							
Swim Teams/ Dive Teams/ Water Polo		$40.00	$40.00	per person/per season			

Meeting: November 13, 2025

Agenda Item Type: Council Action Resolution No. 2025-166R - Fire Boat

Procurement Agenda Item:
Resolution No. 2025-166R, a resolution of the City Council of the City of St. Cloud, Florida, authorizing the purchase of one (1) 25 Courageous Fire Boat, with options available through GSA Contract No. GS-07-0362T, and the award thereof to Gravois Aluminum Boats, LLC, dba Metal Shark, and providing an effective date.

Strategic Key Focus Areas:
Effective Community Safety

Background Information:
Per Jason Miller, Fire Chief, the Fire Department requests the purchase of (1) 25 Courageous Fire Boat, with options, from Metal Shark. This purchase will be funded in part through grant funds awarded by the State of Florida Division of State Fire Marshal. The grant funding is designated to support the acquisition of a new boat to enhance operational capabilities for fire, rescue, and emergency response services. In accordance with the grant's terms and conditions, the boat must be fully purchased, received, and paid for no later than June 30, 2026. Compliance with this deadline is required to ensure eligibility for reimbursement and to meet all reporting and fiscal requirements established by the State of Florida.

Legal Authority:
City of St. Cloud Procurement Policy of St. Cloud Procurement Policy Article VIII, Section 1.

Budget and Recommendation:
Budgeted $504,992.95/Actual Cost up to $504,992.95
001-6510-522.64-00
Staff recommends **APPROVAL** of this request.

Finance Director's Comments:
Finance Director recommends **APPROVAL** of this item.

Procurement Director's Comments:
Recommends approval

City Manager's Comments:
City Manager recommends approval

City Council Action:
11/13/2025 - Final Action

Attachments:

1. 1 - Resolution No. 2025-166R
2. St Cloud Fire - 25 Courageous Fire Boat - Specification and Quote 10-23-2025

RESOLUTION NO. 2025-166R

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ST. CLOUD, FLORIDA, AUTHORIZING THE PURCHASE OF ONE (1) 25 COURAGEOUS FIRE BOAT, WITH OPTIONS AVAILABLE THROUGH GSA CONTRACT NO. GS-07-0362T, AND THE AWARD THEREOF TO GRAVOIS ALUMINUM BOATS, LLC, DBA METAL SHARK, AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of St. Cloud wishes to acquire one (1) 25 Courageous Fire Boat, with options, and

WHEREAS, GSA has previously advertised for bid Contract No. GS-07-0362T titled Gravois Aluminum Boats, LLC dba Metal Shark, and

WHEREAS, GSA has awarded the lowest responsive and responsible bidder, Gravois Aluminum Boats, LLC dba Metal Shark, and

WHEREAS, the City of St. Cloud wishes to extend the benefit of GSA Contract No. GS-07-0362T titled Gravois Aluminum Boats, LLC dba Metal Shark, pursuant to the City of St. Cloud's Procurement Policy Article VIII, Section 1.

NOW THEREFORE, BE IT RESOLVED by the City Council of the City of St. Cloud, Florida, as follows:

Section I. GSA Contract No. GS-07-0362T titled Gravois Aluminum Boats, LLC dba Metal Shark is found to be in the best interest of the City of St. Cloud.

Section II. The City Manager is authorized and is directed to issue a purchase order or "confirmation letter" to said bidders upon a final review of the award process.

Section III. The City Manager is specifically authorized to withhold the purchase order or "confirmation letter" upon determination of any matter or factor, hereafter coming to her attention which may indicate such action is not in the City's best interest, provided that upon such withholding, the City Manager, with reasonable dispatch, shall present the issue to the City Council, in session, for review and direction.

SECTION VI. This resolution shall take effect immediately upon adoption.

PASSED AND ADOPTED by the City Council of the City of St. Cloud, Florida, this 13th day of November 2025.

CITY OF ST. CLOUD

_____
Christian B. Robertson, Mayor

ATTEST:

_____
Ivy Llauro, City Clerk

LEGAL IN FORM AND VALID IF ADOPTED
deBeaubien, Simmons, Knight, Mantzaris & Neal LLP

_____
Daniel F. Mantzaris, City Attorney

25 COURAGEOUS FIRE BOAT – Small Pump Option

SPECIFICATIONS AND QUOTE

SUBMITTED BY:

METAL SHARK
METALSHARKBOATS.COM

Gravois Aluminum Boats d.b.a. Metal Shark
6814 E. Admiral Doyle Drive
Jeanerette LA, 70544

ORIGINAL

October 23, 2025

RE: 25 Courageous Fire Boat

Dear Chief Miller,

Metal Shark is pleased to provide the enclosed Specifications and Pricing information for the 25 Courageous Fire Boat.

Metal Shark appreciates this opportunity and we look forward to any questions, comments or Clarifications you may require.

Warm Regards,



Dean Jones
VP of Sales – LE, Fire/Rescue, & Specialty Projects | Metal Shark Cell: (561) 909-9788
Office: (337) 364-0777
Email: djones@metalsharkboats.com

General Information

Company Contact for Project

Dean Jones VP
of Sales
160 Boro Lan
Franklin, LA 70538
(561) 909-9788
djones@metalsharkboats.com

Availability Overview

Metal Shark takes great pride in the depth of engineering expertise and demonstrated success designing and constructing high-performance, V-bottom vessels and is pleased to bring that experience to the MassPort Fire Department. The proposed vessel is aa well performing parent craft hull design, with an exceptional ride. The designed hull is in service across the Globe. The 27 Courageous as well as all Metal Shark Products are available via GSA, COOP, TEXMAS HGAC, multiple State Contracts as well as commercially and Internationally.

Pricing Structure

GSA Contract: GS-07F-0362T

STANDARD PAYMENT TERMS

- NET 30

DETAILED BUILD SCOPE OF WORK SPECIFICATIONS

25 Courageous BASE BOAT:

- 25' Welded aluminum center console deep vee response monohull boat
- Length: 25' + Appendages, Beam 8'6", Draft: 24 inches with engines trimmed down
- Deep vee hull with outer chines and lifting strakes
- Traditional offshore reverse hull chines
- Includes lifting strakes on hull bottom
- All welded 5086 Aluminum Alloy (5052 is not acceptable)
- Hull, Sides, Stringers & Bulkheads: ¼" & 3/16"
- Keel: 3/8"
- Deck and Console/Ttop: 3/16"
- Transom: 3/8"
- 110 Gallon Removable Fuel Tank
- Bow eye integrated as part of keel
- Integrated motor bracket
- High Volume scuppers with aft drainage
- Flush Mount Electric Horn
- (2) Cupholders

PROPULSION:

- Twin Mercury 4 Stroke 200HP Digital Engines
  - RH and LH Rotation
- DTS Digital Controls and SmartCraft Gauges Package with Fly by Wire Operation
- Power Steering
- (2) Fuel Water Separators
- Stainless Steel Wheel w/ Knob
- Stainless Steel props
  - Pitch TBD to maximize performance
- Electric Trim Tabs w/ LED Indicators
- Installation, Testing and Initial Break-In

ACCOMMODATIONS:

- Center Console w/ Aluminum Ttop
  - 3-Sided Glass T-top
  - Ttop top canopy to include welded rain channels port and starboard
  - Top to include camber for proper Water Channel drainage
  - Overhead red/white switchable at dash lights
  - Canopy to be supported via aluminum piping tied to leaning post bulkhead
  - Forward Console Seat w/ Storage – DELETED for Fire Pump Placement
  - (2) Overhead Fans
- Large Dash with Overhead Radio Pod
  - Interior areas to be coated in matte black to eliminate sun reflection
  - Console dash to include a Neoprene pad
- Safety grab rails in on console and ttop
- Leaning Post and Storage bulkhead w/ Folding Bolster and Backrest Seat
  - Fabric color to be determined by agency
- Self-parking Windshield Wiper and washer
- Folding radar arch

COATINGS & MARKINGS:

- Bottom Anti-Fouling Paint
  - Color: Black
- Hull, Deck, and Console Paint
  - Color TBD by Customer
- Lettering and Striping Package
  - Colors and Lettering TBD by Customer
- EVA Foam Non-Skid
  - Break-Up Pattern
  - Gunnels and forward Deck
  - Color and Grit Level to Be Determined by Customer
- Complete Placard Label Kit for vessel accessories and Options

HULL FENDERING SYSTEM:

- Heavy Duty Extruded Rub Rail
- Mechanically Fastened
- Anti-fouling paint preparation behind rub rail

HULL AND DECK FEATURES AND ACCESSORIES

- Low level Courtesy Lights
  - (6) Lights
  - Red
- Oversized cable raceway w/ pull cords
- Expanding Foam Flotation Below Decks w/ Open bilge
- Bow Anchor Locker
- Stainless Steel Hardware and Latches
  - Isolated using tef-gel and isolating inserts
- Self-bailing deck w/ Guttered Hatch Drains
- (6) cast welded aluminum cleats 10”
- Bow bitt
- Anodes
- (2) 2000 Bilge pumps
- Tow post
  - Aluminum w/ Aluminum Cross Pin
- Engine Protection Bar
- Dive Ladder
- Custom Grab Rail package
  - Location/Layout TBD
- (4) Recessed Tie Downs
- Bilge Alarm
- Bow Push Knees
- (2) Full Height Dive Door
- Hull Side Strakes

ELECTRICAL AND LIGHTING:

- Battery system for three isolated battery banks
- Four Optima Blue Top Batteries
  - (2) Dedicated Engine Start Batteries
    - (1) Per Engine

    - (2) House Battery
- (6) Flush Mount LED Whelen Emergency Lights
    - Customer to Determine Color
- (2) Duplex 12 Volt/USB receptacle
- Electronics Distribution Panels
- Custom Blue Seas Breaker System Designed Specifically for this platform by use of an ELA
    - All wiring must be custom made
    - All wiring must have fully terminated terminals with heat shrink labels on both ends
    - All wiring must have minimum of 1" service loop on both ends
    - Galvanic Isolator
    - Photographic Evidence of Wiring Examples to be included
- Dimmer Switch Panel Lights & Compass
- Shore Power, Battery Charger and Cord Package
- (4) Floodlights
    - Lumitech LED
- (2) 10" RIGID Scene/Flood Lights
- Diamond Switch Panel
- LED navigation lights
- (1) LED Go Spot Light

ELECTONICS & NAVIGATION

- Raymarine AXION Pro +: (2) 12" Touch MFD Display, GPS Antenna, Heading Sensor, and Dual Through Hull Transducers
- (1) ICOM510 VHF w/ Antenna
- Compass, Upgraded Dimmable – Ritchie Navigator or Equivalent
- Whelen WPA3 Siren, Controller, and Hailer
- FLIR M332
- Sionyx NV Camera

FIRE FIGHTING:

- Darley 2BE21 or 2BE23 Fire Pump and Engine Combo
    - Optional based on desired Flow/Pressure Ratings
        - Roughly 110GPM – 300GPM @ 110PSI
- Start Stop Panel
- Plumbed Sea Chest w/ Valve
- Under Deck Piping
- Manual Monitor
- (2) 2.5" Discharges

OUTFITTING:

- (3) Fire Extinguisher
    - Includes Mount
- (1) Removable Flag Mast
- (4) Dive Tank Holders
- (2) 12' Minn Kota Talon Anchors

TRAILER:

- Light Commercial Duty Aluminum I-Beam Trailer
    - BRAND: AMERITRAIL

- LED Lights
- Dual Torsion Axles
- Brakers
- Ladder
- Spare Tire w/ Rim and Mount
- Carpeted bunks
- Tie Down Straps

DELIVERY AND SEA TRIALS:

- Shrink Wrap
- Delivered to Customer Location (Florida)
- Full Basic Drawings of Vessel and all systems
- All Vessel and Component Documentation Package
- Sea Trials Encouraged, but not required

WARRANTY

- 10 year hull and structure
- 1 year bow to stern
- Full Warranty Statement must be included with proposal
- Mercury Engine Warranty: 3 Year
- Major Electronics Warranty: 2 Year
- Trailer Warranty: 2 Year
- Collar Warranty: 2 Year

PRICE QUOTE

- 25 Courageous Package: $504,992.95
  - Pricing is GSA on Contract GS-07F-0362T

ST. CLOUD FIRE RESCUE

Customer Signature: _____

Customer Name: _____

Customer Title: _____

Date: _____

METAL SHARK BOATS

Authorized Signature: _____

Authorized Name: _____

Authorized Title: _____

Date: _____

Meeting: November 13, 2025

Agenda Item Type: Council Action
Preliminary Subdivision Plan for Harvest Grove (f.k.a. Nona Townhomes), PSP25-00002

Community Development Agenda Item:
Request City Council's approval of a Preliminary Subdivision Plan for Harvest Grove (f.k.a. Nona Townhomes), PSP25-00002.

Strategic Key Focus Areas:
High-Performing Government

Background Information:
The subject property is generally located north of East Irlo Bronson Memorial Highway, east of South Narcoossee Road, south of Lillian lee Road, and west of Puffin Road. The development as proposed will support residential infill in an appropriate area with existing infrastructure, compatible residential uses, and access to arterial roadways. The proposed development will provide for infill residential development at a density of 7.97 dwelling units per acre compatible with the underlying Future Land Use of Medium Density Residential that allows for a maximum of 10 dwelling units per acre.

The property was annexed into the City of St. Cloud by Ordinance No. 2025-12 and received a Future Land Use designation of Medium Density Residential by Ordinance 2025-13 to facilitate the development of 136 Single-Family Townhome Units. Concurrently, the applicant is requesting consideration of a Preliminary Subdivision Plan / Final Master Plan (PSP25-00002) for the creation of a 136-unit subdivision with 60 front-loaded units and 76 rear-loaded units with 0.28 acres of right-of-way dedication along Puffin Road.

Legal Authority:
Per Land Development Code Section 2.4.4.G – City Council Review, at its regularly scheduled meeting, the City Council shall review the Preliminary Subdivision Plan. Based on the information generated and the comments made during the development review, the City Council shall approve, disapprove or approve subject to stated conditions. Approval of the Preliminary Subdivision Plan shall authorize review for approval of the Subdivision Construction Plans by the Development Review Committee as outlined in section 2.4.5.

Budget and Recommendation:
There is no cost associated with this item.

Staff reviewed this request for a Preliminary Subdivision Plan on or before September 12, 2025, with no objections. Therefore, staff recommends **APPROVAL** of the request for PSP for Harvest Grove (fka Nona Townhomes)

Finance Director's Comments:

N/A

Procurement Director's Comments:
N/A

City Manager's Comments:
City Manager recommends approval

City Council Action:
11/13/25 - Final Action

Attachments:
1. 1. PSP25-00002 Harvest Grove (fka Nona Townhomes) PSP Staff Report CC 11.13.2025
2. 2. PSP25-00002 Harvest Grove (fka Nona Townhomes) School Capacity Report Report
3. 3. PSP25-00002 Harvest Grove (fka Nona Townhomes) Full Set of Plans

City Council Staff Report

Meeting Date: November 13, 2025

DRC Case No. /Ord. No.
PSP25-00002

Type of Application
Preliminary Subdivision Plam

Case Name
Harvest Grove (fka Nona Townhomes)

Applicant/Agent
Lennar Homes: Patty Mclaughlin/Hanson Walter and Associates, Inc.; Cameron Hindle, P.E.

Owners
Arma Investments LP / Walter Malukiewicz & Christine M Novy

Address/Location
North of East Irlo Bronson Memorial Highway, east of South Narcoossee Road, south of Lillian lee Road, and west of Puffin Road

Parcel ID No(s).
Parcel 1:
05-26-31-4950-0001-0760,
Parcel 2:
05-26-31-4950-0001-0850,
Parcel 3:
05-26-31-4950-0001-0920,
Parcel 4:
05-26-31-4950-0001-0690

Total Land Area
+/- 17.35 acres

Project Planner
Virginia Renteria
Senior Planner



Figure 1 – Aerial Map

Request

The applicant is requesting consideration of a Preliminary Subdivision Plan (PSP) for approximately +/- 17.35 acres of land, known as Harvest Grove (fka Nona Townhomes), as shown in **Figure 1** above.

Background

The subject property is generally located north of East Irlo Bronson Memorial Highway, east of South Narcoossee Road, south of Lillian lee Road, and west of Puffin Road. The development as proposed will support residential infill in an appropriate area with existing infrastructure, compatible residential uses, and access to arterial roadways. The proposed development will provide for infill residential development at a density of 7.97 dwelling units per acre compatible with the underlying Future Land Use of Medium Density Residential that allows for a maximum of 10 dwelling units per acre.

The property was annexed into the City of St. Cloud by Ordinance No. 2025-12 and received a Future Land Use designation of Medium Density Residential by Ordinance 2025-13 to facilitate the development of 136 Single-Family Townhome Units. Concurrently, the applicant is requesting consideration of a Preliminary Subdivision Plan / Final Master Plan (PSP25-00002) for the creation of a 136-unit subdivision with 60 front-loaded units and 76 rear-loaded units with 0.28 acres of right-of-way dedication along Puffin Road.

The Harvest Grove Planned Unit Development will be developed in a single phase with an expected buildout year of 2028. The recreation will be completed for the residents at time of the last Certificate of Occupancy in the development. The new residents of the proposed 136 Single-Family Townhome units will be a part of a Homeowner's Association and will be entitled to the use of the recreational facilities within subject property. In addition, the applicant will provide the construction of Puffin Road from the proposed development's south property line to the north to Lillian Lee Road.

The list below outlines the improvements provided within the proposed development that meet and exceed the requirements:

1. The project will utilize Florida Friendly Landscaping standards and enhanced buffers with a level of mature vegetation at planting.
2. Enhanced landscaping to be installed along Puffin Road screens the development and homesites from the roadway view.
3. Enhanced buffer around the entire perimeter at a 25' minimum from the property line to any unit lot line.
4. Enhanced building separation between the townhome units. The minimum separation requirement is 10 feet and the design separation provided is 15 feet.
5. Community safety will be enhanced via looped, connected internal streets for ease of emergency access without the need for hammerheads or turn arounds.
6. Pedestrian and bicycle-friendly amenities throughout the site and a linear park along Puffin Road provide access and connectivity to amenities, public streets, and nearby local businesses and grocery stores.
7. Open Space is in excess by 22% of the minimum open space requirement. The required open space is 4.27 acres, and the development contains 5.21 acres of open space. This is an excess of 0.94 acres above the minimum.
8. Building elevations wrap around architectural standards on secondary facades and alternate to create visual variety in the community.
9. All internal streets will be privately maintained to avoid adding additional costs to the city residents for maintenance.
10. Provides enhanced amenities for the community:
    a. 0.36 acres of trails (not including sidewalks in the right-of-way)
    b. Work out stations located along the trail
    c. Benches located along the trail and pond
    d. Large and small dog park
    e. Playground
    f. Swing set
    g. Connected sidewalks within the community to the on-site trail network
    h. Sidewalk connections to existing and proposed developments will allow
    i. Walkability to nearby commercial, thereby reducing vehicular trips.

School Capacity Report

1. The district has a history of working closely with the County and two municipalities to alleviate school capacity issues created by expanded residential development. The School District of Osceola County reserves its right to ensure proper mitigation of any impact on school capacity and the collection of Educational System Impact Fees.
2. Harmony High is over capacity and utilizes five (5) relocatable to accommodate its existing enrollment. A space reconfiguration of existing space created 225 new student stations for the 2023/2024 school year and provided relief for Harmony High School. A new high school has been funding and is scheduled to open for the 2026/2027 school year and will provide relief for Harmony High School. Additional capacity may be met through existing space reconfigurations, redistricting and/or charter schools.

Consistency With Strategic Plan Goals:

The proposed Zoning Map Preliminary Master Plan meets the intent of the following City of St. Cloud Strategic Goals:

- ***High-Performing Government:*** *Focus on the continuity and sustainability of core public services.*

Staff Recommendation

Staff reviewed this request for a Preliminary Subdivision Plan on or before September 12, 2025, with no objections. Therefore, staff recommends **APPROVAL** of the request for PSP for Harvest Grove (fka Nona Townhomes)

City Council Requested Action

Per Land Development Code Section 2.4.4.G – City Council Review, at its regularly scheduled meeting, the City Council shall review the Preliminary Subdivision Plan. Based on the information generated and the comments made during the development review, the City Council shall approve, disapprove or approve subject to stated conditions. Approval of the Preliminary Subdivision Plan shall authorize review for approval of the Subdivision Construction Plans by the Development Review Committee as outlined in section 2.4.5.

Attachments

- Osceola County School Capacity Report
- Harvest Grove (fka Nona Townhomes) full set of plans

THE SCHOOL DISTRICT OF OSCEOLA COUNTY, FLORIDA

PLANNING SERVICES DEPARTMENT

SCHOOL CAPACITY REPORT - THREE YEAR OUTLOOK

Date:	4.15.25	**Current FLU:**	MDR
SDOC #:	2024/25-0048	**Requested FLU:**	N/A
Jurisdiction:	St. Cloud	**Current Zoning:**	PUD
DRC #:	PSP25-00002	**Requested Zoning:**	N/A
Project Name:	Harvest Grove (fka Nona Townhomes)	**PID:**	05-26-31-4950-0001-0760 / 0850
Project Location:	Puffin Rd., St. Cloud, 34771		05-26-31-4950-0001-0920 / 0690
Comments Due Date:	5.13.25		
AC:	17.35		

If proposed project increases utilization of schools above adopted level of service, applicant will obtain a Letter of Agreement outlining an accommodation plan for the students generated by this project, consistent with the provisions of Sections 6.1. - 6.7. of the Interlocal Agreement for the Planning and Coordination of Public Schools throughout Osceola County (as required by Section 163.31777, F.S.[2012]). "The County/Cities and the applicant must collaborate with the School Board to identify available means that might be used to achieve sufficient capacity to accommodate the development, which may include, but not be limited to developer contributions, project phasing, or developer provided facility improvements." If you should have any questions please feel free to contact the Osceola School District Planning Services Department at 407-518-2964.

Total Proposed Residential Units by Type

SF	0	**TH**	136	**MF**	0
Single Family		Townhome		Multi-Family	
Condo	0	**MH**	0	**STR**	0
Condominium		Mobile Home		Short Term Rental	
HOP	0	**VV**	0	**AWH**	0
Housing for Older Persons		Vacation Villas		Affordable-Workforce Housing	

Estimated Number of New Students Generated by Proposed Development

Elem. (K-5)	14	**Middle (6-8)**	8	**High (9-12)**	13

Student Generation Calculations

Example Calculation: 100 (SF Units) x 0.178 (Elem. Rate) = 18 (Students)

Residential Categories					
Total Units	SF	TH	MF	Condo	MH
136	0	136	0	0	0

Student Generations Rates			
	Elem. (K-5)	Middle (6-8)	High (9-12)
SF	0.139	0.086	0.144
TH	0.096	0.052	0.089
MF	0.157	0.083	0.114
CONDO	0.059	0.03	0.047
MH	0.107	0.065	0.082

Total Students	
Elem (K-5)	14
Middle (6-8)	8
High (9-12)	13

Level of Service (LOS)

	2024/2025			2027/2028		
School Boundaries Impacted	COFTE	Permanent Student Capacity	Current Level of Service	3 YR. Projected COFTE	Projected COFTE w/ Impact	Projected LOS w/ Impact
HTES	1,017	1,174	87%	1,002	1,016	87%
NCMS	1,077	1,528	70%	1,065	1,073	70%
HRHS	2,571	2,716	95%	2,467	2,480	91%

Comments

The District has a history of working closely with the County and two municipalities to alleviate school capacity issues created by expanded residential development. The School District of Osceola County reserves its right to ensure proper mitigation of any impact on school capacity and the collection of Educational System Impact Fees.

Harmony High is over capacity and utilizes five (5) relocatables to accommodate its existing enrollment. A space reconfiguration of existing space created 225 new student stations for the 2023/2024 school year and provided relief for Harmony High School. A new high school has been fund d and is scheduled to open for the 2026/2027 school year and will provide relief for Harmony High School. Additional capacity may be met through existing space reconfigurations, redistricting and/or charter schools. Page 1 of 1

PRELIMINARY SUBDIVISION PLAN

FOR

HARVEST GROVE

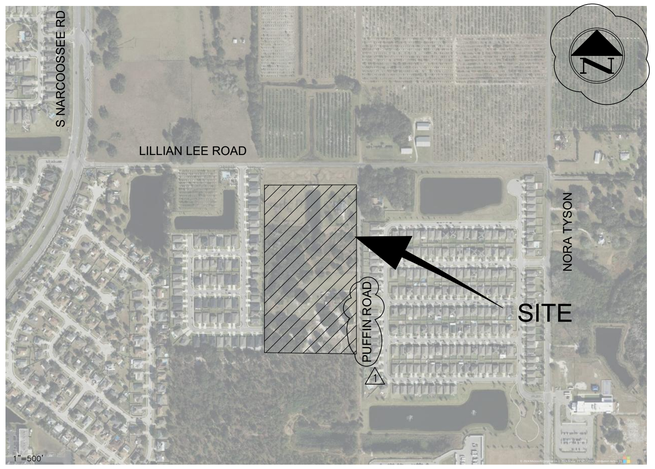
(F.K.A. NONA TOWNHOMES)

PID:
05-26-31-4950-0001-0690, 05-26-31-4950-0001-0760,
05-26-31-4950-0001-0850, 05-26-31-4950-0001-0920

OWNER:

LENNAR HOMES
LOGAN LANTRIP
6675 WESTWOOD BLVD 5TH FLOOR
ORLANDO, FL 32821

LOCATION MAP



NOTE:
THE FOLLOWING PROPOSED FACILITIES SHOWN ON THE DEVELOPMENT PLANS ARE FOR REFERENCE PURPOSES ONLY AND EACH SHALL REQUIRE A SEPARATE BUILDING PERMIT. THE LIST INCLUDES, BUT NOT LIMITED TO: PROPOSED BUILDINGS, SANITARY LIFT STATIONS, LIGHT FIXTURES (POLES) THAT ARE INDEPENDENT FROM ANY BUILDING STRUCTURE, FENCES, GATES, MONUMENT SIGNS, DUMPSTER ENCLOSURES, AND RETAINING WALL.

REVISION TABLE		
1	05/29/2025	REVISIONS PER CITY COMMENTS
NO.	DATE	DESCRIPTION

PREPARED BY:

8 BROADWAY, SUITE 104, KISSIMMEE, FLORIDA 34741-5708
PHONE: (407) 847-9433 FAX: (321) 442-1045
ENG. CERT. OF AUTHOR. No. 3265/SUR. CERT. OF AUTHOR. No. 3270
ENGINEERING, SURVEYING AND PLANNING
Hanson, Walter & Associates, Inc.

DRAWING INDEX	
SHEET NO.	TITLE
01	COVER SHEET
02	BOUNDARY AND TOPOGRAPHICAL SURVEY
03	PRELIMINARY SITE PLAN
04	UTILITY PLAN
05	STORMWATER PLAN
06	TYPICAL SECTIONS AND MISCELLANEOUS DETAILS
07	BUILDING ELEVATIONS (1)
08	BUILDING ELEVATIONS (2)
09	SPECIFICATIONS

LEGAL DESCRIPTION:

PARCEL 1:
LOTS 76, 85 AND 92, THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION OF SECTION 5, TOWNSHIP 26 SOUTH, RANGE 31 EAST, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK B, PAGE 22, PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA.

TOGETHER WITH A 1982 SKYLINE MOBILE HOME WITH ID. NO. 54630245EA AND ID. NO. 54630245EB.

PARCEL 2:
LOT 69, LESS AND EXCEPT THE NORTH 17.5 FEET THEREOF, THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION OF SECTION 5, TOWNSHIP 26 SOUTH, RANGE 31 EAST, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK B, PAGE 22, PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA.

DENSITY STATEMENT:		
TOTAL AREA:	17.35	AC
(LESS) PRESERVED WETLANDS:	0.00	AC
(LESS) DEDICATED ROW:	0.29	AC
NET DEVELOPABLE ACRES:	17.06	AC
PROPOSED FRONT LOAD TOWNHOMES:	60	DU
PROPOSED REAR LOAD TOWNHOMES:	76	DU
TOTAL RESIDENTIAL DWELLING UNITS:	136	DU
PROPOSED DENSITY (UNIT COUNT/ NET DEVELOPABLE ACRES):	7.97	DU/AC

DEVELOPMENT TABLE		
TYPE	FRONT LOAD	REAR LOAD
NUMBER OF LOTS	60	76
TYPICAL LOT AREA (SF)	2,250	2,400
TYPICAL LOT AREA (AC)	0.052	0.055
TOTAL AREA OF ALL LOTS (AC)	3.120	4.180
TOTAL AREA OF ALL LOTS (SF)	153,722	204,996

ADJACENT PROPERTIES	FUTURE LAND USE	MIN. BUFFER REQUIRED	PROVIDED LANDSCAPE TRACT
NORTH	LDR	0'	25'
EAST	LDR	0'	35'
SOUTH	HB	0'	25'
WEST	MDR	0'	25'

1. Residential Development Standards

SINGLE-FAMILY REAR LOAD ATTACHED DWELLINGS	
MINIMUM LOT WIDTH	Streetside Corner: 30 feet Building Perimeter Interior: 27.5 feet Interior: 20 feet
MINIMUM LIVING AREA	1,750 square feet
MAXIMUM LOT COVERAGE	75%
MAXIMUM BUILDING HEIGHT	30 feet
SINGLE-FAMILY FRONT LOAD ATTACHED DWELLINGS	
MINIMUM LOT WIDTH	Streetside Corner: 35 feet Building Perimeter Interior: 32.5 feet Interior: 25 feet
MINIMUM LIVING AREA	1,800 square feet
MAXIMUM LOT COVERAGE	75%
MAXIMUM BUILDING HEIGHT	30 feet
MINIMUM BUILDING SETBACKS	
FRONT LOAD TOWNHOME FRONT (GARAGE)	25 feet
FRONT LOAD TOWNHOME FRONT (BUILDING)	10 feet
FRONT LOAD TOWNHOME REAR	10 feet
REAR LOAD TOWNHOME FRONT	10 feet
REAR LOAD ALLEY	20 feet
INTERNAL SIDE	0-foot (i)
PERMITER UNIT SIDE	7.5 feet
STREET SIDE	10 feet
MINIMUM SEPARATION BETWEEN BUILDINGS	15 feet
ACCESSORY STRUCTURE	5 feet
PUD PERIMETER REQUIREMENT	
ENHANCED LANDSCAPE LINEAR PARK	35-feet minimum along east property line adjacent to Puffin Road
ENHANCED LANDSCAPE TRACT	25-feet minimum along west, north, and south property lines

NOTES:
i. 0-foot setbacks pertain to internal dwelling units for single-family attached products.
ii. All setbacks must be measured from the property line.
iii. Perimeter buffers are not required per the Land Development Code for the proposed land use of single family to any adjacent use. Enhanced perimeter landscaped areas will be developed in accordance with Section B.5 of this ordinance.

1. WATER, SANITARY SEWER & RECLAIM
TOHO WATER AUTHORITY
951 M.L.K. JR BLVD.
KISSIMMEE, FL 34741
(407) 944-5000

2. ELECTRIC
ORLANDO UTILITIES COMMISSION
2903 17TH ST
ST. CLOUD, FL 34769
(407) 957-7231

3. CABLE TELEVISION
BRIGHT HOUSE NETWORKS
3767 ALL AMERICAN BLVD
ORLANDO, FL 32810
(407) 532-8509

4. TELEPHONE
COMCAST COMMUNICATIONS
8130 CR. 44, LEG A
LEESBURG, FL 34768
(352) 315-8528

5. CENTURYLINK
33 N. MAIN ST
WINTER GARDEN, FL 34787
(407) 814-5344

6. OSCEOLA COUNTY PUBLIC WORKS
1 COURTHOUSE SQUARE, SUITE 3100
KISSIMMEE, FL 34741
(407) 742-0662

7. CITY OF ST. CLOUD PUBLIC WORKS
1300 9TH ST
ST CLOUD, FL 34769
(407) 957-7347

SITE INFORMATION:

1. OWNER:
LENNAR HOMES
LOGAN LANTRIP
LOGAN.LANTRIP@LENNAR.COM
(352) 217-8908
6675 WESTWOOD BLVD 5TH FLOOR
ORLANDO, FL 32821

Know what's below. Call before you dig.

2. OBJECTIVES:
THE INTENT OF THIS SITE IS TO CONSTRUCT A 136 LOT TOWNHOME NEIGHBORHOOD

3. EXISTING ZONING/LAND USE:
THE EXISTING ZONING FOR THIS SITE IS: R-1B
THE EXISTING FUTURE LAND USE FOR THIS SITE IS: MEDIUM DENSITY RESIDENTIAL (MDR)

4. PROPOSED ZONING/LAND USE
THE PROPOSED ZONING FOR THIS SITE IS: PUD

5. SETBACK:

FRONT LOAD TOWNHOME FRONT	25'
FRONT LOAD TOWNHOME REAR	10'
STREET SIDE	10'
BETWEEN BUILDINGS	15'
REAR LOAD TONWHOME FRONT	10'
REAR LOAD ALLEY	20'

6. PROPOSED SITE CALCULATIONS:

SITE AREA=	743,310 SQ FT	17.06 ACRES	98.33%
DEDICATED ROW=	12,604 SQ FT	0.29 ACRES	1.67%
TOTAL SITE AREA=	755,914 SQ FT	17.35 ACRES	100%
IMPERVIOUS (PAVEMENT/CONCRETE)=	129,578 SQ FT	2.97 ACRES	17.43%
IMPERVIOUS (POND)=	58,053 SQ FT	1.33 ACRES	7.81%
BUILDING=	219,300 SQ FT	5.03 ACRES	29.50%
PERVIOUS=	336,379 SQ FT	7.72 ACRES	45.25%
TOTAL IMPERVIOUS AREA=	406,931 SQ FT	9.34 ACRES	54.75%
TOTAL PERVIOUS AREA=	336,379 SQ FT	7.72 ACRES	45.25%

7. TRIP GENERATION:
BASED ON THE 11TH EDITION OF THE INSTITUTE OF TRANSPORTATION ENGINEERS, TRIP GENERATION MANUAL; SINGLE-FAMILY ATTACHED/(TOWNHOMES) (SITE CODE: 215)

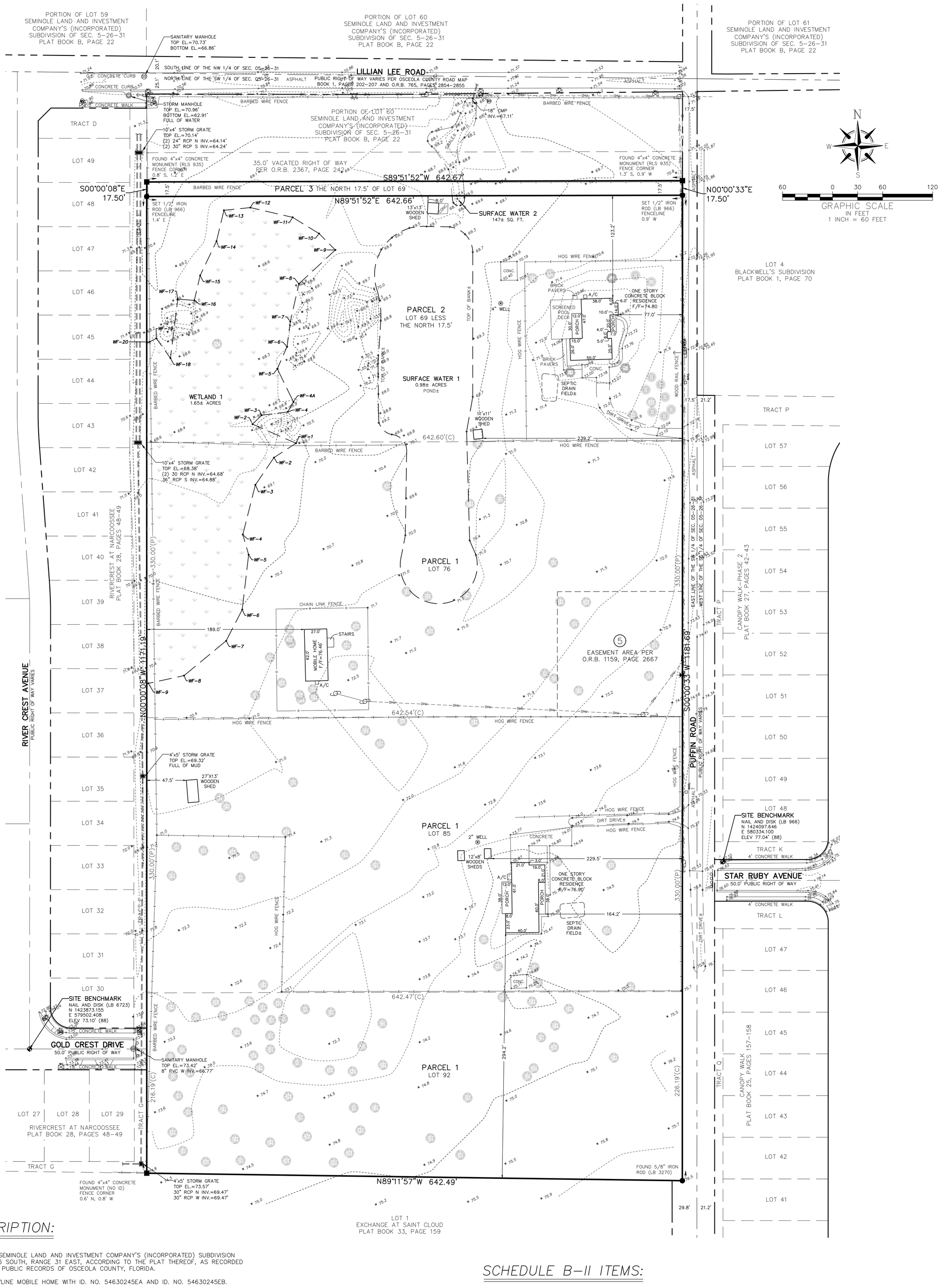
WEEKDAY 136 (LOTS) = 988 TRIPS (50% ENTER / 50% EXIT)
WEEKDAY (A.M. PEAK HOUR) = 136 (LOTS) = 66 TRIPS (17% ENTER / 83% EXIT)
WEEKDAY (P.M. PEAK HOUR) = 136 (LOTS) = 78 TRIPS (67% ENTER / 33% EXIT)

8. FIELD VERIFY ALL UTILITIES PRIOR TO CONSTRUCTION. IF CONFLICTS ARISE NOTIFY ENGINEER PRIOR TO CONSTRUCTION.
9. THERE SHALL BE A 10' DRAINAGE AND UTILITY EASEMENT ALONG ALL FRONT LOT LINES, 5' DRAINAGE AND UTILITY EASEMENT ALONG ALL REAR AND SIDE LOT LINES.
10. STORMWATER SYSTEMS TO BE MAINTAINED BY HOA
11. PUBLIC ROAD TO BE MAINTAINED BY CITY OF ST. CLOUD
12. PRIVATE ROADS TO BE MAINTAINED BY HOA.
13. ALL APPLICABLE STATE AND FEDERAL PERMITS MUST BE OBTAINED BEFORE COMMENCEMENT OF DEVELOPMENT.
14. MAINTENANCE OF TRAFFIC PLAN (MOT) SHALL INCLUDE HOURS OF OPERATION. "VMB'S AND PIO NOTIFICATION ARE ADDITIONALLY REQUIRED SEVERAL DAYS IN ADVANCE OF OPERATIONS. "MUST HAVE MOT CERTIFIED FIELD PERSONNEL. "A BOND OR LETTER OF CREDIT MAY BE REQUIRED. "INSURANCE CERTIFICATE IS REQUIRED FOR WORK IN ROW "NOTIFICATION MUST BE PROVIDED TO ALL RIGHT OF WAY USERS PRIOR TO WORK IN ROW. PROVIDE VERIFICATION TO INSPECTIONS PRIOR TO PRE-CONSTRUCTION CONFERENCE. "A LICENSE IS REQUIRED FOR UNDERGROUND UTILITIES INSTALLATION." SIDEWALKS SHALL BE MAINTAINED OPEN DURING CONSTRUCTION, OR A SAFE, TEMPORARY, APPROVED PEDESTRIAN PATH SHALL BE PROVIDED UNTIL SIDEWALK CAN BE RE-OPENED. "PURSUANT TO THE PROVISIONS OF FLORIDA STATUTE 553.851. "GAS NOTIFICATION #
15. CIVIL ENGINEER OF RECORD: CAMERON HINDLE (CHINDLE@HANSONWALTER.COM)
GEOTECHNICAL ENGINEER: LUIS ALMODOVAR (LALMODOVAR@TEAMUES.COM)
SURVEYOR: RICK BROWN (RICK@JSURVEYING.COM)
ENVIRONMENTAL: MARK AUSLEY (MARK@BIO-TECHCONSULTING.COM)
LANDSCAPE ARCHITECT: KARINA VEAUDRY (KVEAUDRY@NFCLANDSCAPE.COM)
TRANSPORTATION ENGINEER: CHARLOTTE DAVIDSON (CHARLOTTED@TRAFFICMOBILITY.COM)
DEVELOPER: DANIEL LAROSA (DANIEL.LAROSA@LENNAR.COM)
16. THE FOLLOWING PROPOSED FACILITIES SHOWN ON THE DEVELOPMENT PLANS ARE FOR REFERENCE PURPOSES ONLY AND EACH SHALL REQUIRE A SEPARATE BUILDING PERMIT. THE LIST INCLUDES, BUT IN NOT LIMITED TO: PROPOSED BUILDINGS, SANITARY LIFT STATIONS, LIGHT FIXTURES (POLES) THAT ARE INDEPENDENT FROM ANY BUILDING STRUCTURE, FENCES , GATES, MONUMENT SIGNS, DUMPSTER ENCLOSURES AND DECORATIVE RETAINING WALLS.
17. THIS SITE WILL BE CONSTRUCTED IN ONE PHASE.
18. ALL PROPOSED UTILITIES WILL BE PROVIDED UNDERGROUND.
19. ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FIRM MAP NO. 12097C0115G, THIS PROPERTY IS LOCATED IN FLOOD ZONE "X".
20. THE SITE SOILS CLASSIFICATION PER THE SOIL SURVEY OF OSCEOLA COUNTY PUBLISHED BY THE NATIONAL COOPERATIVE SOIL SURVEY, DATED APRIL 1979 IS : MYAKKA FINE SAND, ONA FINE SAND, AND TAVARES FINE SAND.
21. RECREATION AND OPEN SPACE CALCULATIONS PROVIDED ON SHEET 03.
22. CUT AND FILL EARTHWORK FOR THE PROJECT SHALL BALANCE ONSITE AND THERE SHALL BE NO EXPORT OF FILL FROM THIS SITE.
23. TOHO WATER AUTHOIRTY WILL MAINTAIN THE WATER, REUSE AND SANITARY SEWER FORCE MAIN WITHIN THE RIGHT-OF-WAY.
24. MAXIMUM BUILDING HEIGHT IS 2 STORIES, AND MAXIMUM HEIGHT OF 30 FEET.
25. ANY PROPOSED ROADWAY LANE CLOSURE MUST BE SUBMITTED IN WRITING ACCOMPANIED BY A SPECIFIC MOT PLAN DETAILING THE SIGNAGE/DETOUR PLAN, DURATION OF THE ROAD LANE CLOSURE, NOTIFICATION OF LOCAL EMERGENCY AND LAW ENFORCEMENT OFFICES, NOTIFICATION OF CITY OF ST. CLOUD PUBLIC INFORMATION OFFICE AND ALL AFFECTED LOCAL RESIDENTS MUST BE NOTIFIED OF THE ROAD IN ADVANCE PRIOR TO THE BEGINNING OF ANY CONSTRUCTION ACTIVITY WITHIN THE ROADWAYS. ALL ROADWAY LANE CLOSURE MUST BE DONE IN STAGES WHEREIN ONLY SECTIONS OF COUNTY ROADWAYS TRAVEL LANES WILL BE CLOSED AT A TIME. THIS IS TO KEEP EMERGENCY VEHICLES ROAD ACCESSIBILITY IMPACT TO A MINIMUM.
25. ALL PURPLE PIPES CONSTRUCTED AS PART OF THE RE-USE SYSTEM SHALL NEVER BE USED TO CONVEY DRINKING WATER AT ANY TIME IN THE FUTURE.
26. ALL INTERNAL ROADS WILL BE PRIVATE INFRASTRUCTURE MAINTAINED BY THE HOA WITH A 10FT UTILITY EASEMENTS ON EACH SIDE OF ROW.
27. A HOMEOWNERS ASSOCIATION WILL BE CREATED AND WILL MAINTAIN THE OPEN SPACE AND RECREATION ON SITE.
28. ELECTRICAL DESIGN WILL BE PROVIDED WITH CONSTRUCTION PLANS.
29. ALL PROPOSED UTILITIES/STORMWATER IMPROVEMENTS ARE PRELIMINARY. THEY WILL BE FINALIZED DURING CONSTRUCTION PLANS.
30. STREET TREES WITHIN THE RIGHT-OF-WAY SHALL BE MAINTAINED BY THE HOA AT A VERTICAL CLEARANCE OF 13.5 FEET.
31. ALL INTERNAL ROADS TO BE PRIVATELY MAINTAINED. PUFFIN ROAD TO BE MAINTAINED BY COSC.

PSP25-0002
PUD24-00005
CPA24-00009
ANX24-00006
HWA JOB # 5557-01
SHEET 01 OF 09

THE DRAWINGS ARE THE PROPERTY OF HANSON, WALTER & ASSOCIATES, INC. AND ARE NOT TO BE USED OR LOANED FOR ANY PURPOSE WITHOUT THE WRITTEN CONSENT OF HANSON, WALTER & ASSOCIATES, INC. ANY REPRODUCTION, IN WHOLE OR IN PART, OR USE OF THE DESIGNS OR CONCEPTS ON ANY OTHER PROJECT WITHOUT THE EXPRESSED WRITTEN AUTHORIZATION OF HANSON, WALTER & ASSOCIATES, INC. IS PROHIBITED BY LAW.

I:\5557-01\ENGINEERING\CADD\PLANS\Preliminary Site Plan\5-5557-01 COVER PSP.dwg * Aug 28, 2025-4:03pm * plotted by chindle



AREA:

PARCEL 1	13.00±	ACRES
PARCEL 2	4.35±	ACRES
PARCEL 3	0.26±	ACRES
TOTAL	17.61±	ACRES

LEGAL DESCRIPTION:

PARCEL 1:
LOTS 76, 85 AND 92, THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION OF SECTION 5, TOWNSHIP 26 SOUTH, RANGE 31 EAST, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK B, PAGE 22, PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA.

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PARCEL 3:
NORTH 17.5 FEET OF LOT 69, THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION OF SECTION 5, TOWNSHIP 26 SOUTH, RANGE 31 EAST, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK B, PAGE 22, PUBLIC RECORDS OF OSCEOLA COUNTY, FLORIDA.

SURVEYOR'S NOTES:

ELEVATIONS SHOWN HEREON ARE BASED ON N.A.V.D. 1988 DATUM. REFERENCE BENCHMARK IS OC-1046, A BRASS DISK SET IN CONTROL STRUCTURE LOCATED APPROXIMATELY 290' EAST OF THE CENTERLINE OF NORA TYSON ROAD AND 300' SOUTH OF THE CENTERLINE OF LAKE LIZZIE DRIVE. ELEVATION = 71.96'

BEARINGS SHOWN HEREON ARE BASED ON THE FLORIDA STATE PLANE COORDINATE SYSTEM, EAST ZONE. (NAD 83, 2007 ADJUSTMENT) AS DETERMINED FROM GLOBAL POSITIONING SYSTEM (GPS).

NO UNDERGROUND INSTALLATIONS, IMPROVEMENTS OR ROOF OVERHANGS HAVE BEEN LOCATED EXCEPTS AS NOTED HEREON.

ACCORDING TO THE FLOOD INSURANCE RATE MAP NO. 12097C0115G DATED JUNE 18, 2013, THE LAND AND THE IMPROVEMENTS AS SHOWN HEREON ARE NOT WITHIN A 100-YEAR FLOOD HAZARD ZONE. THE LAND IS IN ZONE "X".

POINT ELEVATIONS WITH TWO DECIMAL PRECISION DENOTE PAVEMENT, CONCRETE AND TOP OF WATER SHOTS. ONE DECIMAL PRECISION DENOTES NATURAL GROUND OR A SOFT SHOT, ALL OTHERS ARE AS NOTED.

WETLANDS SHOWN HEREON WERE FLAGGED BY BIO-TECH CONSULTING IN MARCH 2024.

MATTERS OF RECORD SHOWN HEREON ARE BASED ON A COMMITMENT FOR TITLE INSURANCE BY CHICAGO TITLE INSURANCE COMPANY, COMMITMENT NUMBER 11550419, DATED FEBRUARY 8, 2024 AT 8:00 AM, REVISION NUMBER 4, DATED FEBRUARY 27, 2024.

PROPERTY ADDRESS (PER TITLE COMMITMENT): 1850 PUFFIN ROAD, ET. AL., ST. CLOUD, FLORIDA 34771

PARCELS 1, 2, AND 3 ARE CONTIGUOUS WITHOUT GAP, GORE, OR HIATUS.

THE PROPERTY HAS ACCESS TO PUFFIN ROAD, A PUBLICLY DEDICATED RIGHT OF WAY, WITHOUT GAP, GORE, OR HIATUS.

ALL SIZES AS SHOWN.

MAPLE TREE
OAK TREE
PINE TREE

CERTIFICATION:

I HEREBY CERTIFY TO:

LENNAR HOMES, LLC, A FLORIDA LIMITED LIABILITY COMPANY
CALATLANTIC NATIONAL TITLE SOLUTIONS, LLC
CHICAGO TITLE INSURANCE COMPANY
LWL LAW, PLLC

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 7(a), 8, 14, 16, AND 19 OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED ON **JUNE 18, 2024.**

DATE OF PLAT OR MAP:
JUNE 18, 2024

RICHARD D. BROWN, P.S.M.
STATE OF FLORIDA
REGISTRATION NO. 5700
(NOT VALID WITHOUT SIGNATURE AND

RICHARD D. BROWN CERTIFICATE No. 5700 STATE OF FLORIDA REGISTERED SURVEYOR & MAPPER

6/18/2024
DATE

SCHEDULE B-II ITEMS:

4. INTENTIONALLY DELETED

5. PRIVATE EASEMENT SET FORTH IN WARRANTY DEED RECORDED DECEMBER 9, 1993, IN OFFICIAL RECORDS BOOK 1159, PAGE 2660 AND FURTHER DESCRIBED IN PRIVATE EASEMENT AND LICENSE AGREEMENT RECORDED DECEMBER 9, 1993, IN OFFICIAL RECORDS BOOK 1159, PAGE 2667. (AS TO PARCEL 1) **(APPLIES – AS SHOWN)**

6. ORDINANCE NO. 2018-14 RECORDED MARCH 26, 2018, IN OFFICIAL RECORDS BOOK 5306, PAGE 2325. (AS TO PARCEL 1) **(APPLIES – UNPLOTTABLE)**

7. ORDINANCE NO. 2018-15 RECORDED MARCH 26, 2018, IN OFFICIAL RECORDS BOOK 5306, PAGE 2328. (AS TO PARCEL 1) **(APPLIES – UNPLOTTABLE)**

8. ORDINANCE NO. 2018-16 RECORDED MARCH 26, 2018, IN OFFICIAL RECORDS BOOK 5306, PAGE 2332. (AS TO PARCEL 1) **(APPLIES – UNPLOTTABLE)**

12. MATTERS ARISING FROM THE FACT THAT THE OSCEOLA COUNTY PROPERTY APPRAISER DOES NOT ACKNOWLEDGE A SEPARATE ASSESSMENT FOR THE NORTH 17.5 FEET OF LOT 69. (AS TO PARCEL 3).

13. POTENTIAL DRAINAGE RIGHTS FROM THE DITCH TRAVERSING THE SOUTHERN PORTION OF LOT 60 AND INTO LOT 69. (AS TO PARCELS 2 AND 3)

ABBREVIATIONS

P.B.	PLAT BOOK	(C)	CALCULATED	°	DEGREES	ALL PROPERTY CORNERS AS NOTED.	
D.B.	DEED BOOK	(P)	PLAT	'	MINUTES	D.U.E.	DRAINAGE AND UTILITY EASEMENT
BK.	BOOK	(D)	DESCRIBED	"	SECONDS	ID	IDENTIFICATION
PG.	PAGE	(M)	MEASURED	±	MORE OR LESS	P.C.P	PERMANENT CONTROL POINT
SEC.	SECTION	C.B.	CHORD BEARING	L.B.	LICENSED BUSINESS	P.O.B.	POINT OF BEGINNING
TWP.	TOWNSHIP	CH.	CHORD	L.S.	LICENSED SURVEYOR	P.O.C.	POINT OF COMMENCEMENT
RGE.	RANGE	R.	RADIUS	B.W.F.	BARBED WIRE FENCE	F/F	FINISH FLOOR ELEVATION
COR.	CORNER	L	LENGTH	H.W.F.	HOG WIRE FENCE	L.F.E.	LOWEST FLOOR ELEVATION
AC.	ACRES	Δ	DELTA	C.L.F	CHAIN LINK FENCE	G.F.E.	GARAGE FLOOR ELEVATION
P.S.M.	PROFESSIONAL SURVEYOR AND MAPPER	T	TANGENT	W.F	WOOD FENCE	R/W	RIGHT OF WAY
		C/L	CENTERLINE	E.P.	EDGE OF PAVEMENT	O.R.	OFFICIAL RECORDS
BM	BENCHMARK			FRM.	FRAME	STY.	STORY
C.B.S.	CONCRETE BLOCK & STUCCO			O/S	OFFSET	CONC.	CONCRETE

EL.	ELEVATION		
P.T.	POINT OF TANGENCY		
P.C.	POINT OF CURVE		
P.R.C.	POINT OF REVERSE CURVE		
P.I.	POINT OF INTERSECTION		
N.&T.	NAIL AND TAB		
C.M.P.	CORRUGATED METAL PIPE		
R.C.P.	REINFORCED CONCRETE PIPE		
INV.	INVERT		
FD.	FOUND		
P.R.M.	PERMANENT REFERENCE MONUMENT		
TX	TRANSFORMER		

BE UNDERGROUND POWER LINE
OHU OVERHEAD POWER LINE
BT BURIED TELEPHONE LINE
GAS BURIED GAS MAIN
W BURIED WATER LINE
SAN BURIED SANITARY SEWER LINE

LEGEND

	BENCHMARK	CO	CLEAN OUT
	WOOD POWER POLE	SS	SANITARY SEWER M.HOLE
	CONCRETE POWER POLE	D	STORM SEWER M.HOLE
	METAL POWER POLE	GM	GAS METER
	GUY WIRE ANCHOR		GAS VALVE
	WOOD LIGHT POLE	CATV	CABLE TELEVISION RISER
	CONCRETE LIGHT POLE	TELR	TELEPHONE RISER
MLP	METAL LIGHT POLE	TCB	TELEPHONE CONTROL BOX
FLP	FIBERGLASS LIGHT POLE	TRANS	ELECTRIC TRANSFORMER
	FIRE HYDRANT	ESM	ELECTRIC SERVICE METER
	WATER VALVE	TSC	TRAF. SIGNAL CONTROL BOX
W	WELL		BOLLARD
WM	WATER METER		SIGN
RWV	RECLAIMED WATER VALVE	FO	FIBER OPTIC MARKER
RWM	RECLAIMED WATER METER	TEL	TELEPHONE MARKER
APV	AIR RELEASE VALVE	GAS	GAS MARKER

ALTA/NSPS LAND TITLE SURVEY

HARVEST GROVE (F.K.A. NONA TOWNHOMES)

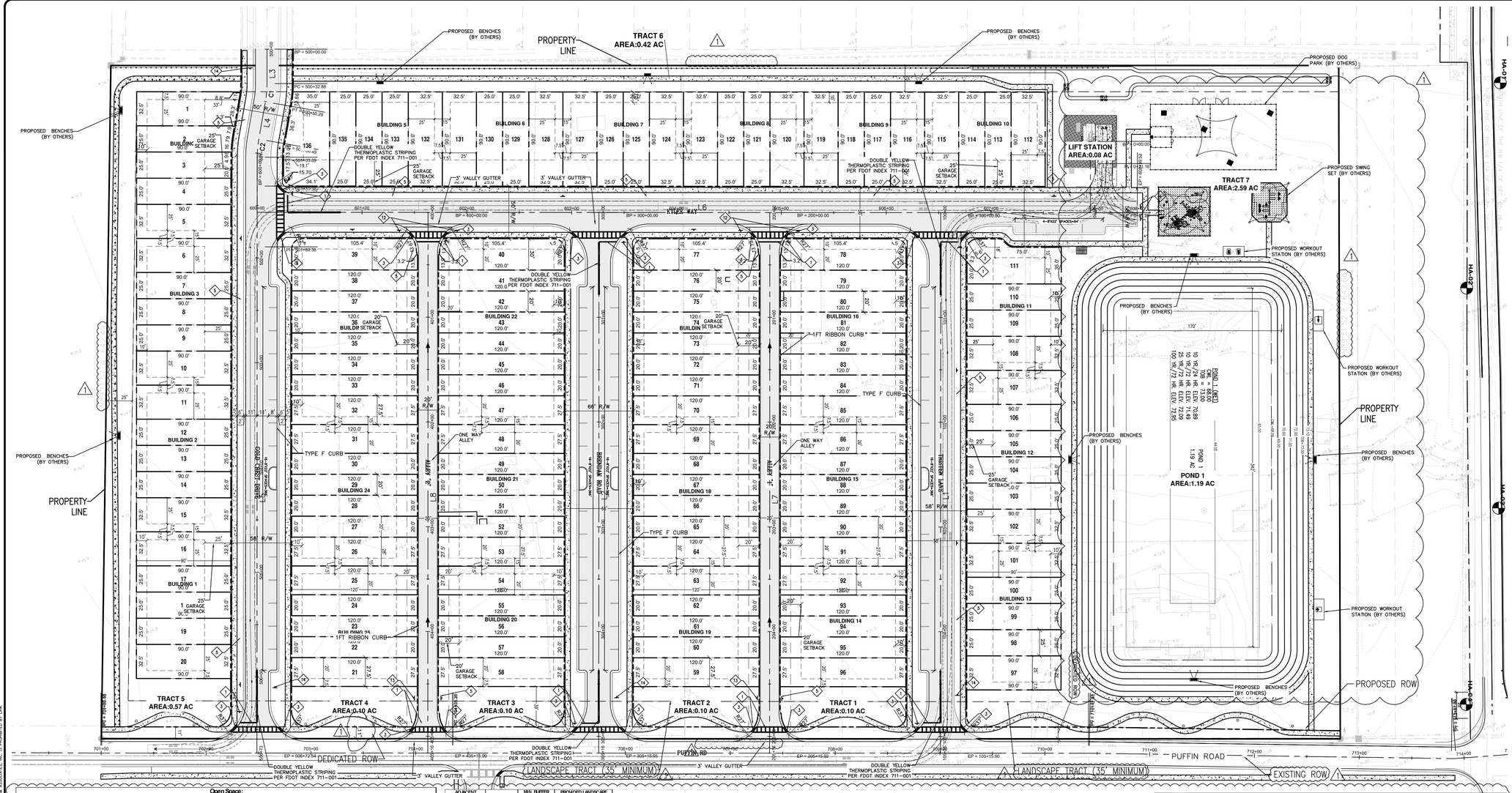
REVISIONS
TITLE COMMITMENT 2/15/24, 2/28/24
ATTORNEY COMMENTS 2/28/24
WETLANDS 3/7/24, UPDATE 6/18/24
CAD FILE# 24-061 ALTA.DWG

NAVD 1988
VERTICAL DATUM
SEC. 5 TWP. 26 S. RGE. 31 E.

DATE OF SURVEY 2/5/24 | JOB #24-061 | SCALE: 1"=60' | DRAWN BY: CRS | CHECKED BY: RDB

JOHNSTON'S SURVEYING INC.
900 Cross Prairie Parkway, Kissimmee, Florida 34744
(407) 847-2179 ● Fax (407) 847-6140 LB 966

SHEET 1 OF 1



GRAPHIC SCALE

50 0 25 50 100

(IN FEET)
1 inch = 50 ft.

LEGEND

1. STOP SIGN (R1-1) AND 12' THERMOPLASTIC STOP BAR.
2. 6' WIDE CROSSWALK PER FDOT INDEX No. 17346.
3. CAST-IN-PLACE HANDICAP RAMP- FDOT INDEX No. 304 FOR RAMP DETAILS. (REFER TO INDEX 522-002 DETAIL)
4. 2-OM-1 END OF ROADWAY SIGNS- REFER TO FDOT INDEX No. 700-109 DETAIL.
5. NO PARKING SIGN (SEE DETAIL THIS SHEET)
6. SPEED LIMIT SIGN - 25 MPH
7. 6' WIDE SPECIAL EMPHASIS CROSSWALK (PER LATEST FDOT INDEX 711-002)
8. 9' WIDE SPECIAL EMPHASIS CROSSWALK (FOR LATEST FDOT INDEX 711-002)
9. DIRECTIONAL ROADWAY SIGN (W1-7)- REFER TO FDOT INDEX NO. 700-109 DETAIL.
10. YIELD TO PEDESTRIANS AHEAD (W11-2) WITH (W16-7P)
11. PEDESTRIANS AHEAD (W11-2) WITH (W16-9P)
12. DO NOT ENTER SIGN (R5-1)
13. ONE WAY ONLY SIGN (R6-1)
14. SPEED LIMIT SIGN - 25 MPH
15. STREET LIGHTS BY OTHERS (SEE SHEET 36 FOR DETAILS)
16. STREET SIGN PER OSCEOLA COUNTY ROAD CONSTRUCTION SPECIFICATIONS MANUAL-FIGURE 14 (SEE THIS SHEET)

PROPOSED ASPHALT
PROPOSED CONCRETE

NOTES:

1. FIELD VERIFY ALL UTILITIES PRIOR TO CONSTRUCTION. IF CONFLICTS OCCUR, CONTACT ENGINEER PRIOR TO CONSTRUCTION.
2. ALL ONSITE SIDEWALKS ARE 5' WIDE UNLESS OTHERWISE NOTED.
3. REFER TO LANDSCAPE/HARDSCAPE PLANS FOR ENHANCEMENT FEATURES AND SIGNS.
4. ALL CURBS ARE MIAMI TYPE UNLESS OTHERWISE NOTED.
5. ALLSIGNAGE AND STRIPING TO BE INSTALLED IN ACCORDANCE WITH MUTCD (LATEST EDITION) STANDARDS AND SPECIFICATIONS.
6. SIDEWALK RAMPS TO BE CONSTRUCTED AT PROPOSED SITE DRIVEWAYS SHALL BE "CAST IN PLACE" DETECTABLE WARNING IN ACCORDANCE TO FDOT INDEX 304.
7. LOCATIONS OF SITE LIGHTING IS APPROXIMATE. FINAL LOCATION TO BE DETERMINED BY OUC.
8. ALL SIGNAGE REQUIRES A SEPARATE PERMIT.
9. THE IRRIGATION SYSTEM REQUIRES A SEPARATE PERMIT.
10. MAINTENANCE OF TRAFFIC TO BE SUPERVISED BY A CERTIFIED PERSON.
11. ALL CONCRETE SHALL BE AN APPROVED FDOT MIX DESIGN OF 3,000 PSI OR GREATER.
12. MAXIMUM CROSS SLOPES ON ALL CROSSWALKS SHALL BE 2% AND THE MAXIMUM SLOPE FOR RAMPS SHALL BE 1 TO 12.
13. THE FOLLOWING PROPOSED FACILITIES SHOW ON THE DEVELOPMENT PLANS ARE FOR REFERENCE PURPOSE ONLY AND EACH SHALL REQUIRE A SEPARATE BUILDING PERMIT. THE LIST INCLUDES, BUT IS NOT LIMITED TO: PROPOSED BUILDINGS, SANITARY LIFT STATIONS, LIGHT FIXTURES (POLES) THAT ARE INDEPENDENT GATES MONUMENT SIGNS, DUMPSTER ENCLOSURES, DECORATIVE RETAINING WALLS THAT EXCEED THREE FT. IN HEIGHT.
14. ALL CURB RAMPS SHALL BE CR-E PER FDOT INDEX #304, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
15. ALL ROADWAY STRIPING WITHIN COUNTY RIGHT OF WAY SHALL BE THERMOPLASTIC.
16. STOP SIGNS WITHIN ALL PUBLIC RIGHT OF WAY SHALL BE 30" STOP SIGNS.
17. THE PROPOSED MONUMENT SIGN IS FOR REFERENCE PURPOSES ONLY. A SEPARATE BUILDING PERMIT IS REQUIRED FOR SIGNAGE.
18. CONTRACTOR SHALL SAWCUT A MINIMUM OF 1 FT. ALONG OLD MELBOURNE HIGHWAY INTO THE EXISTING PAVEMENT TO CREATE A CLEAN EDGE FOR ROADWAY CONNECTION.
19. EXISTING PAVEMENT MARKINGS ON OLD MELBOURNE HIGHWAY SHALL BE REMOVED BY MILLING AND OVERLAYING THE UNDERLYING PAVEMENT. CONSTRUCTION PLANS SHOULD INCLUDE THE MILL AND OVERLAY AREA AND SPECIFICATIONS FOR ANY AREA WHERE EXISTING PAVEMENT MARKING MUST BE REMOVED.
20. ALL SIGNS, STRIPING AND ADA ACCESSIBILITY SHALL BE PER THE LATEST EDITIONS OF FDOT, MUTCD, AND FBC.
21. THE EXISTING LAND USE FOR THIS SITE IS R-1B. THE EXISTING FUTURE LAND USE FOR THIS SITE IS MEDIUM DENSITY RESIDENTIAL (MDR).
22. MAXIMUM BUILDING HEIGHT IS 2 STORIES, AND MAXIMUM HEIGHT OF 30 FEET.

Open Space:			
Total Open Space Required (25% of total area)	4.27	ac	185,828 SF
Proposed Open Space (Open Space Tracts)	3.88	ac	169,069 SF
Open Pond Space Provided (Max 50% of required open space)	1.33	ac	58,053 SF
Total Open Space Provided	5.21	ac	227,123 SF

ADJACENT PROPERTIES	LAND USE	MIN. BUFFER REQUIRED	PROVIDED LANDSCAPE TRACT
NORTH	LDR	0	25'
EAST	LDR	0	35'
SOUTH	HS	0	25'
WEST	MR	0	25'

TRACT TABLE	AREA (AC)	AREA (SF)	OWNER	MAINTENANCE/ RESPONSIBILITY	TRACT USE
TRACT 1	0.11	4596	HOA	HOA	OPEN SPACE
TRACT 2	0.11	4586	HOA	HOA	OPEN SPACE
TRACT 3	0.10	4573	HOA	HOA	OPEN SPACE
TRACT 4	0.10	4564	HOA	HOA	OPEN SPACE
TRACT 5	0.57	24932	HOA	HOA	OPEN SPACE
TRACT 6	0.41	17961	HOA	HOA	OPEN SPACE
TRACT 7	2.48	107857	HOA	HOA	OPEN SPACE
LS TRACT	0.07	2916	TOHO	TOHO	LIFT STATION
TRACT POND A	1.33	58053	HOA	HOA	OPEN SPACE / WATER MGMT.

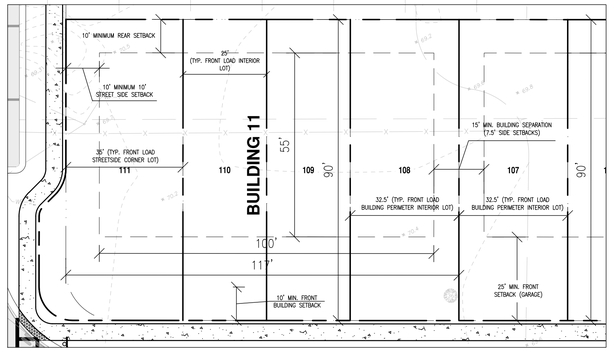
Density Statement:				
Total Area (Gross Area)	17.35	ac	755,914	SF
(Less) Preserved Wetlands	0	ac	0	SF
(Less) Dedicated ROW	0.29	ac	12,604	SF
Net Developable Area	17.06	ac	743,310	SF
Proposed Front Load Townhomes	60	du		
Proposed Rear Load Townhomes	76	du		
Total Residential Dwelling Units	136	du		
Proposed Density (Unit Count/ Net developable area)	**7.97**	**du/ac**		
Recreation:				
Dog Park	0.18	AC	7,940	SF
Covered Playground	0.05	AC	2,315	SF
Swing Set	0.03	AC	1,200	SF
Appropriately Designed Water Management Ponds	1.33	AC	58,053	SF
Trails	0.36	AC	15,713	SF

Parking Standards:		
Required Parking (4 spaces per unit) = (136 units * 4 spaces/unit)	544	spaces
Required Parking (1 spaces per every 2 units) = (136 units * 0.5 spaces/unit)	68	spaces
Total Required Parking	612	spaces
FL Spaces Provided (2 spaces garage & 2 spaces driveway) (60 homes * 4 spaces)	240	spaces
RL Spaces Provided (2 spaces garage & 2 spaces driveway) (76 homes * 4 spaces)	304	spaces
On Street Parking Spaces Provided	68	spaces
Total Parking Provided	612	spaces

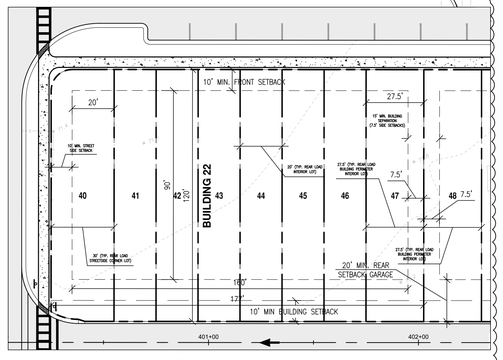
NOTES:
1.) HOUSING PRICES CAN CHANGE DEPENDING ON MARKET CONDITIONS, BUT HOME PRICE ESTIMATES RANGE FROM $330,000 TO $370,000.
2.) PROJECT WILL BE CONSTRUCTED IN ONE PHASE WITH THE AMENITIES INCLUDED IN THE FIRST PHASE.

NO PARKING ANY TIME

(12"X18")
NO PARKING SIGN
(TYP.) N.T.S.



TYPICAL 25'x90' FL TOWNHOMES & MINIMUM CORNER
NOT TO SCALE



TYPICAL 20'x120' FL TOWNHOMES & MINIMUM CORNER
NOT TO SCALE

PSP25-0002
PUD24-00005
CPA24-00009
ANX24-00006

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SEC.	18	
TWP.	26 S	
RANGE	32 E	

DATE	BY	REVISIONS
05/29/2025	CH	REVISIONS PER CITY COMMENTS ⚠1

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ENGINEERING, SURVEYING AND PLANNING
Hanson, Walter & Associates, Inc.

HARVEST GROVE ⚠1
PRELIMINARY SUBDIVISION PLAN

PRELIMINARY SITE PLAN

SHEET Nº 03 of 09
JOB Nº 5557-01

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I:\5557-01\ENGINEERING\CADD\PLANS\Preliminary Site Plan\5-5557-01 PRELIMINARY SITE DIM PSP.dwg * Aug 28, 2025-5:08pm * plotted by chindle

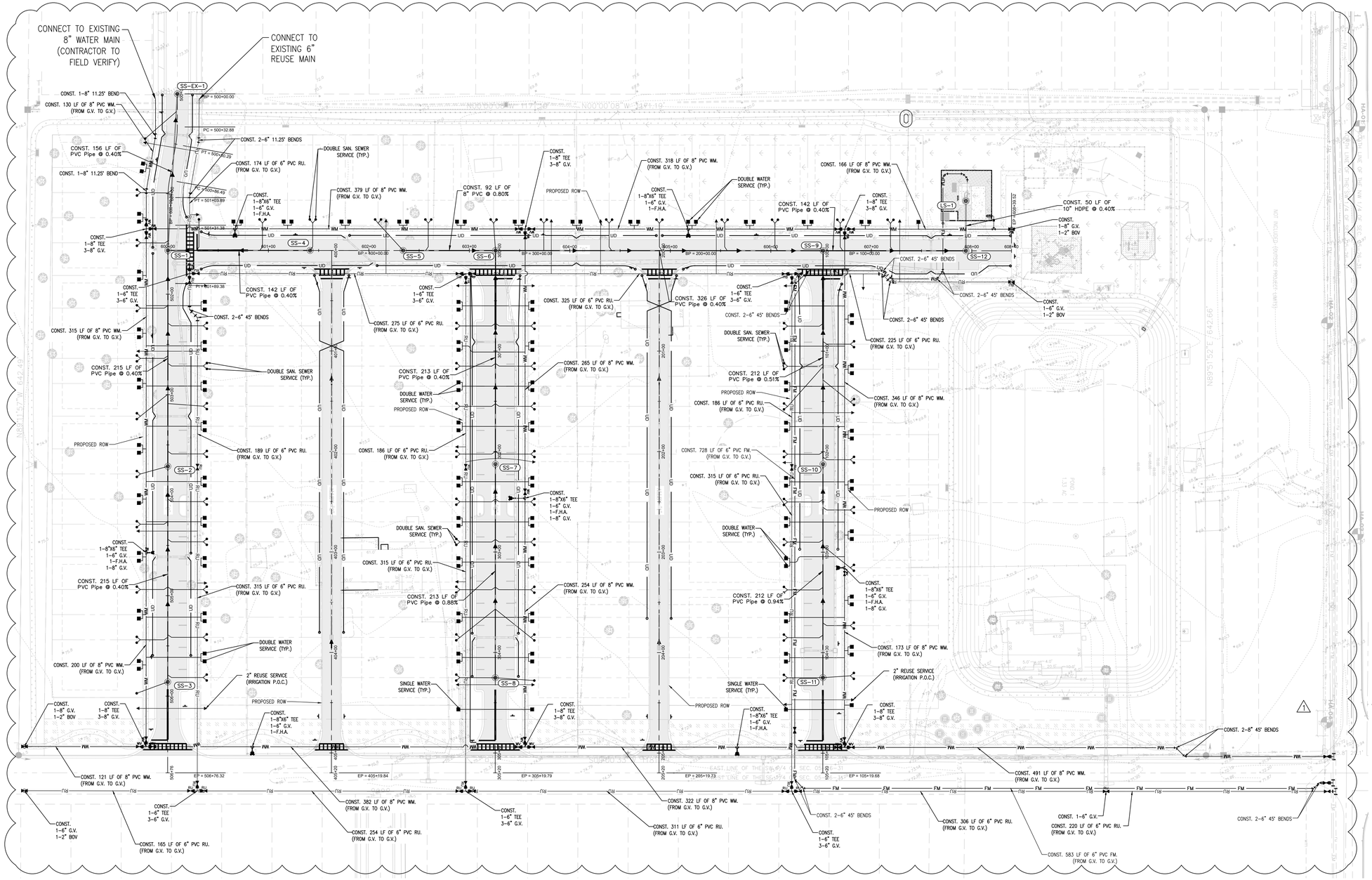
LEGEND

11¼	PROPOSED 11 1/4" BEND	WM	PROPOSED WATER MAIN (WM)
22½	PROPOSED 22 1/2" BEND	FM	PROPOSED FORCE MAIN (FM)
45	PROPOSED 45° BEND	RU	PROPOSED REUSE WATER MAIN (RU)
90	PROPOSED 90° BEND	UD	PROPOSED UNDERDRAIN (UD)
SSS	PROPOSED SINGLE SANITARY SERVICE		PROPOSED GATE VALVE (G.V.), TEE
DSS	PROPOSED DOUBLE SANITARY AND REUSE SERVICE		PROPOSED SANITARY MANHOLE (SMH)
SRS	PROPOSED SINGLE REUSE SERVICE		PROPOSED FIRE HYDRANT ASSEMBLY (F.H.A) 1–TEE AS REQUIRED 1–6" GATE VALVE 1–6" PVC LEG AS REQUIRED 1–FIRE HYDRANT
SWS	PROPOSED SINGLE WATER SERVICE		10' UTILITY EASEMENT
DWS	PROPOSED DOUBLE WATER SERVICE		RIGHT–OF–WAY LINE
	PROPOSED SANITARY SEWER (SS)		

GRAPHIC SCALE

50 0 25 50 100

(IN FEET)
1 inch = 50 ft.



NOTES:

1. FIELD VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. IF CONFLICT ARE ENCOUNTERED CONTACT ENGINEER PRIOR TO CONSTRUCTION.
2. ALL SANITARY LATERALS SHALL BE A MINIMUM OF 6" WITH A MINIMUM SLOPE OF 1.0% SLOPE.
3. ALL THESE ARE OSCEOLA COUNTY RIGHT OF WAYS AND THE MINIMUM COVER OVER TWA UTILITY MAINS SHALL BE NO LESS THAN 36" IN CITY, FDOT RIGHT OF WAYS AND EASEMENTS AND 42.
4. CONTRACTOR SHALL AS–BUILT ALL UTILITY CROSSINGS TO INSURE HORIZONTAL AND VERTICAL SEPARATIONS REQUIREMENTS ARE MET.
5. POLYETHYLENE TUBING SHALL BE SDR–9 RATED AT 200 PSI MINIMUM.
6. MAINTAIN A MINIMUM 5' HORIZONTAL SEPARATION BETWEEN TREE PLANTING AND ALL UTILITIES (MAINS & APPURTENANCES).
7. REPAIR/REPLACE EXISTING SIDEWALKS, IRRIGATION, LANDSCAPE AND HARDSCAPE DAMAGED AS A RESULT OF CONSTRUCTION OF PROPOSED PROJECT. (SPECIFICALLY WITH RESPECT OF INSTALLATION OF FIRE SERVICES & HYDRANTS)
8. IF THERE IS A NEED TO RELOCATE ANY ABOVE GROUND UTILITY FROM THE PROPOSED LOCATION AS SHOWN ON THE SITE DEVELOPMENT PLANS, INCLUDING BUT NOT LIMITED TO TRANSFORMER BOXES, THEN A SITE DEVELOPMENT PLAN REVISION SHALL BE SUBMITTED, REVIEWED, AND APPROVED PRIOR TO ANY INSTALLATION OF SUCH ABOVE GROUND UTILITIES. THIS INCLUDES ALSO, ANY CHANGE TO ABOVE GROUND UTILITY SCREENING. THE PROPOSED PULL BOXES IN THE PUBLIC SIDEWALK SHALL BE LOCATED UNDERGROUND.
9. ALL SANITARY MANHOLES, RIMS, CLEAN OUTS, POTABLE WATER VALVE BOXES SHALL BE ADJUSTED TO MATCH FINISHED GRADE.
10. CONTRACTOR SHALL COORDINATE WITH THE OSCEOLA COUNTY FIRE DEPARTMENT, IF THE STRUCTURE IS TO BE MARKED WITH AN APPROVED FIRE FIGHTER SAFETY WARNING SIGN IN ACCORDANCE WITH FLORIDA ADMINISTRATIVE CODE 69A–3.012.
11. DEPENDING ON PHASING, THE AUTOMATED FLUSHING DEVICES CAN BE RELOCATED INSTEAD OF INSTALLING NEW ONES.
12. ANY DEFLECTIONS THAT ARE OVER 2° IN DEPTH ON PRESSURE MAIN FROM THE CURRENT RUNNING LINE WILL REQUIRE AN ARV.
13. ALL REAR YARDS SHALL BE SODDED WITH DROUGHT TOLERANT BAHIA GRASS
14. SEWER PIPES LESS THAN 15' DEEP WILL REQUIRE SDR 35 PIPE. 15' TO 20' DEEP WILL REQUIRE SDR 26 PIPE.
15. A MINIMUM OF 15' WIDE UTILITY EASEMENT IS REQUIRED CENTERED OVER THE WATER MAIN, FIRE HYDRANTS AND UP TO WATER METERS.
16. A MINIMUM OF 20' WIDE UTILITY EASEMENT IS REQUIRED CENTERED OVER THE SANITARY MAIN AND SERVICE LATERALS UP TO CLEAN–OUTS
17. ALL HYDRANTS ASSEMBLIES ON THE PLAN ARE NOT TO SCALE, ALL HYDRANTS ASSEMBLIES MUST BE 4 FEET FROM EDGE OF PAVEMENT
18. TOHO WATER AUTHORITY WILL MAINTAIN THE SANITARY SEWER FORCE, WATER AND REUSE WATER MAINS WITHIN THE OSCEOLA COUNTY RIGHT–OF–WAY.
19. HAND HOLE LIDS WILL BE REQUIRED FOR CLEANOUTS LOCATED IN AREAS WITH VEHICULAR TRAFFIC.
20. WATER SERVICES 2" AND SMALLER SHALL HAVE DOUBLE STRAP TAPPING SADDLE, CORPORATION STOP, BLUE PE TUBING. NO FITTINGS ALLOWED BETWEEN CORP. STOP AND CURB STOP.
21. REUSE SERVICES 2" AND SMALLER SHALL HAVE DOUBLE STRAP TAPPING SADDLE, CORPORATION STOP, PURPLE PE TUBING. NO FITTINGS ALLOWED BETWEEN CORP. STOP AND CURB STOP.
22. ALL ARV SHALL BE PLACED OUTSIDE OF CLEAR ZONE OF ANY RIGHT OF WAY. IF POSSIBLE, IT SHALL BE PLACED IN AN EASEMENT ADJACENT TO THE RIGHT OF WAY.
23. ALL PROPOSED POLES (SIGN, TRAFFIC, LIGHT) PERMANENT STRUCTURES SHALL MAINTAIN A MINIMUM 10FT HORIZONTAL SEPARATION FROM TWA MAINTAINED UTILITIES.
24. THERE SHOULD BE A MINIMUM 3FT HORIZONTAL SEPARATION BETWEEN THE FORCE–MAIN AND REUSE–MAIN.
25. PERMANENT STRUCTURES SHALL MAINTAIN A MINIMUM 15 FEET OF HORIZONTAL SEPARATION FROM TOHO MAINTAINED UTILITIES.
26. FOR DOUBLE AND SINGLE SANITARY SERVICES TOHO'S MAINTENANCE RESPONSIBILITY SHALL END AT THE SINGLE 6"RISER AT PROPERTY LINE.
27. CLEANOUTS SHALL BE LOCATED ON THE LOT LINE, WITH 3 FEET OF SEPARATION FROM ALL OTHER SERVICES (INCLUDING ELECTRICAL AND TELECOM PEDESTALS).
28. COMPACT FITTINGS ARE NOT ALLOWED ON FORCE MAINS. ONLY STANDARD FITTINGS MEETING ANSI/A WWA A21.10/C110.
29. FITTINGS AND BENDS IN THE PLANS ARE NOT SHOWN TO SCALE.
30. NO VALVES ARE TO BE LOCATED WITHIN THE CURB.
31. ALL ARV AND GATE VALVES SHALL NOT BE LOCATED WITHIN THE SIDEWALK.
32. ALL DIRECTIONAL BORES SHALL COMPLY WITH THE FOLLOWING INFORMATION:
    a) PIPE MATERIAL SHALL BE MINIMUM DR17 HDPE DIP SIZE
    b) 8 GAUGE LOCATE WIRE (2 WIRE MINIMUM)
    c) INTERIOR PIPE DIAMETER OF HDPE SHALL MATCH INTERIOR PIPE DIAMETER OF CONNECTING PIPE
    d) GATE VALVES ARE REQUIRED ON EACH SIDE OF THE ROAD CROSSING
33. A CLEAR SPACE OF 36 INCHES SHALL BE KEPT AROUND HYDRANTS, CLEAR OF TREES, BUSHES, FENCES, SIGNS.
34. STREET TREES WITHIN THE RIGHT–OF–WAY SHALL BE MAINTAINED BE THE HOA AT A VERTICAL CLEARANCE OF 13.5 FEET.

⚠1

PSP25–0002
PUD24–00005
CPA24–00009
ANX24–00006

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DESIGN CH	F.B. NO.	SEC. 18			
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CAD# (see stamp)	DATE 11/2020		05/29/2025	CH	REVISIONS PER CITY COMMENTS ⚠1
			DATE	BY	REVISIONS

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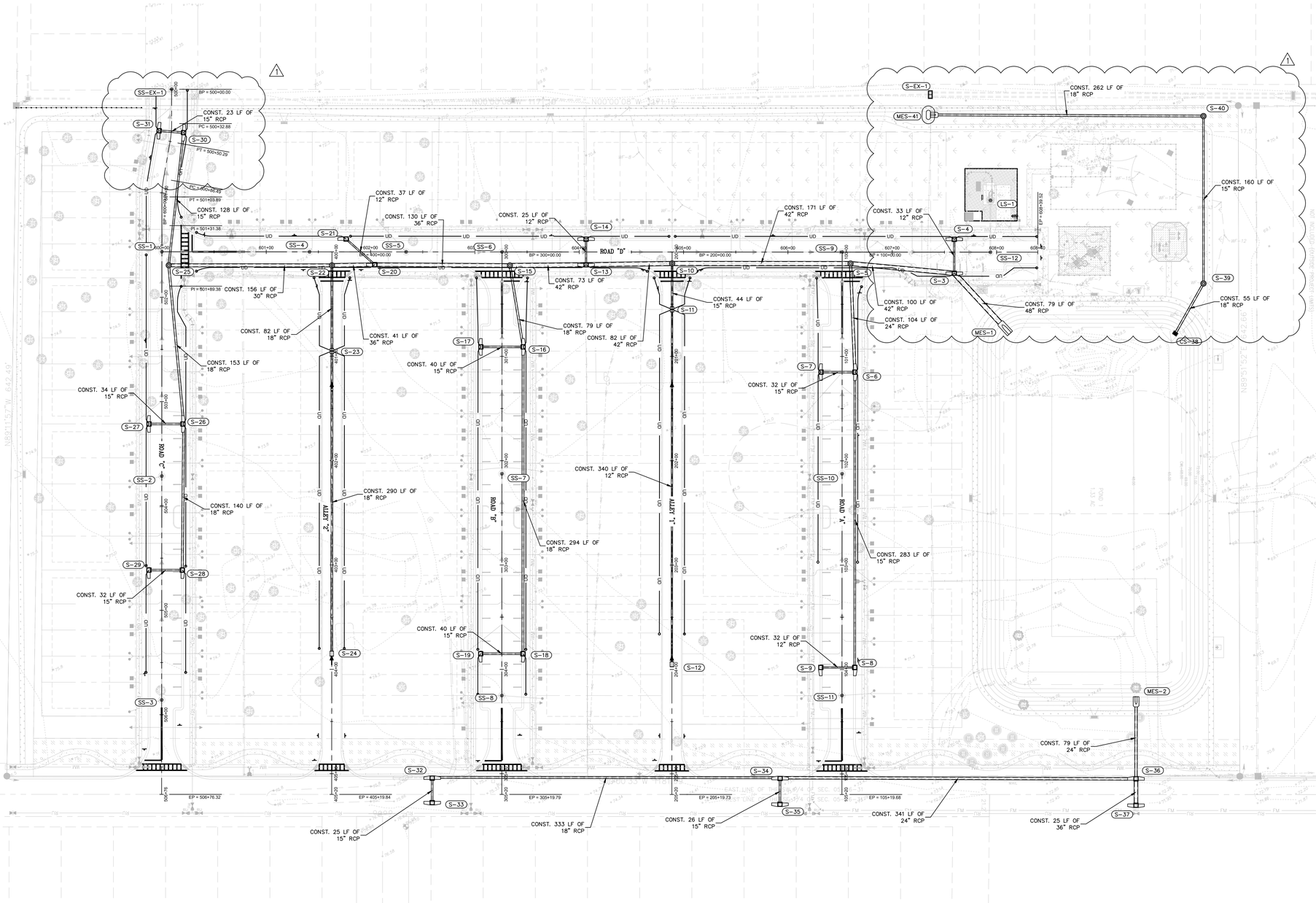
ENGINEERING, SURVEYING AND PLANNING
Hanson, Walter & Associates, Inc.

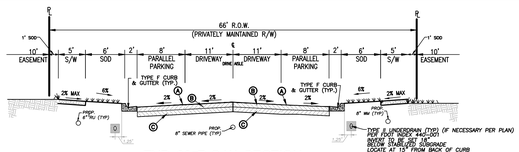
HARVEST GROVE ⚠1
PRELIMINARY SUBDIVISION PLAN

UTILITY PLAN

SHEET Nº 04 of 09
JOB Nº 5557-01

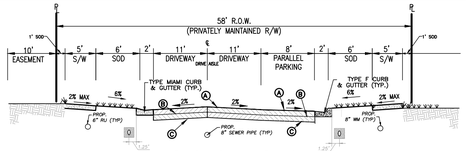
I:\5557-01\ENGINEERING\CADD\PLANS\Preliminary Site Plan\5-5557-01 UTILITY PLAN PSP.dwg * Jun 10, 2025-3:21pm * plotted by BMillon


ROAD "D"
ROAD "C"
ROAD "E"
ROAD "F"
ALLEY "1"
ALLEY "2"
CONST. 23 LF OF 15" RCP
CONST. 128 LF OF 15" RCP
CONST. 156 LF OF 30" RCP
CONST. 153 LF OF 18" RCP
CONST. 34 LF OF 15" RCP
CONST. 140 LF OF 18" RCP
CONST. 32 LF OF 15" RCP
CONST. 25 LF OF 15" RCP
CONST. 37 LF OF 12" RCP
CONST. 130 LF OF 36" RCP
CONST. 82 LF OF 18" RCP
CONST. 41 LF OF 36" RCP
CONST. 290 LF OF 18" RCP
CONST. 40 LF OF 15" RCP
CONST. 25 LF OF 12" RCP
CONST. 73 LF OF 42" RCP
CONST. 79 LF OF 18" RCP
CONST. 82 LF OF 42" RCP
CONST. 40 LF OF 15" RCP
CONST. 294 LF OF 18" RCP
CONST. 333 LF OF 18" RCP
CONST. 44 LF OF 15" RCP
CONST. 340 LF OF 12" RCP
CONST. 26 LF OF 15" RCP
CONST. 32 LF OF 15" RCP
CONST. 171 LF OF 42" RCP
CONST. 100 LF OF 42" RCP
CONST. 104 LF OF 24" RCP
CONST. 283 LF OF 15" RCP
CONST. 341 LF OF 24" RCP
CONST. 33 LF OF 12" RCP
CONST. 262 LF OF 18" RCP
CONST. 79 LF OF 48" RCP
CONST. 160 LF OF 15" RCP
CONST. 55 LF OF 18" RCP
CONST. 79 LF OF 24" RCP
CONST. 25 LF OF 36" RCP
MES-1
MES-2
LS-1
CS-38
EP = 506+76.32
EP = 405+19.84
EP = 305+19.79
EP = 205+19.73
EP = 105+19.68
EP 607+39.52
N89°11'57"W 642.49'
N89°11'57"W 642.49'
N89°11'57"W 642.49'



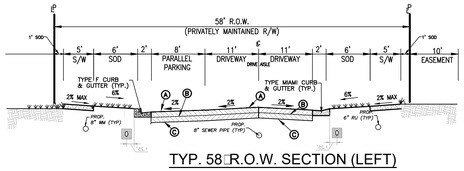
TYP. 66'R.O.W. SECTION
STREET B

NTS



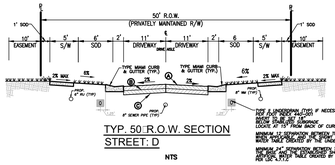
TYP. 58'R.O.W. SECTION (RIGHT)
STREETS: C & D

NTS



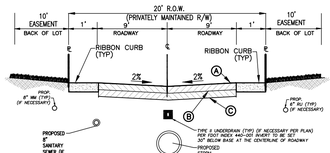
TYP. 58'R.O.W. SECTION (LEFT)
STREETS: C & D

NTS



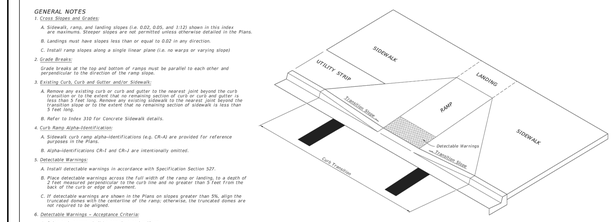
TYP. 50'R.O.W. SECTION
STREET: D

NTS



TYPICAL ALLEYWAY (20'R.O.W)

NTS

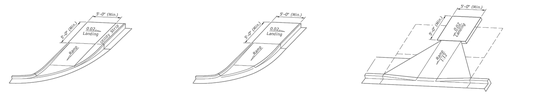


CURB RAMP NOMENCLATURE

GENERAL NOTES

1. Cross Slopes and Grades:
   A. Sidewalk, ramp, and landing slopes (i.e. 0.02, 0.05, and 1:12) shown in this index are maximums. Steeper slopes are not permitted unless otherwise detailed in the Plans.
   B. Landings must have slopes less than or equal to 0.02 in any direction.
   C. Install ramp slopes along a single linear plane (i.e. no warps or varying slope)
2. Grade Breaks:
   Grade breaks at the top and bottom of ramps must be parallel to each other and perpendicular to the direction of the ramp slope.
3. Existing Curb, Curb and Gutter and/or Sidewalk:
   A. Remove any existing curb or curb and gutter to the nearest joint beyond the curb transition or to the extent that no remaining section of curb or curb and gutter is less than 3 feet long. Remove any existing sidewalk to the nearest joint beyond the transition slope or to the extent that no remaining section of sidewalk is less than 3 feet long.
   B. Refer to Index 310 for Concrete Sidewalk details.
4. Curb Ramp Alpha-Identification:
   A. Sidewalk curb ramp alpha-identifications (e.g. CR-A) are provided for reference purposes in the Plans.
   B. Alpha-identifications CR-I and CR-J are intentionally omitted.
5. Detectable Warnings:
   A. Install detectable warnings in accordance with Specification Section 527.
   B. Place detectable warnings across the full width of the ramp or landing, to a depth of 2 feet, and centered between the back of curb and the gutter line and no greater than 3 feet from the back of the curb or edge of pavement.
   C. If detectable warnings are shown in the Plans on slopes greater than 5%, align the truncated domes with the centerline of the ramp; otherwise, the truncated domes are not required to be aligned.
6. Detectable Warnings – Acceptance Criteria:
   A. Color and texture shall be complete and uniform.
   B. 90% of individual truncated domes shall be in accordance with the Americans with Disabilities Act Standards for Transportation Facilities, Section 705.
   C. There shall be no more than 4 non-compliant domes in any one square foot.
   D. Non-compliant domes shall not be adjacent to other non-compliant domes.
   E. Surfaces shall not deviate more than 0.10" from a true plane.

LAST REVISION 11/01/16	DESCRIPTION:	FDOT FY 2017-18 DESIGN STANDARDS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX NO. 304	SHEET NO. 1 of 8



LANDINGS FOR CURB RAMPS WITHOUT SIDEWALKS
(See CR-F, CR-G & CR-K Respectively For Detectable Warning Details/Options)

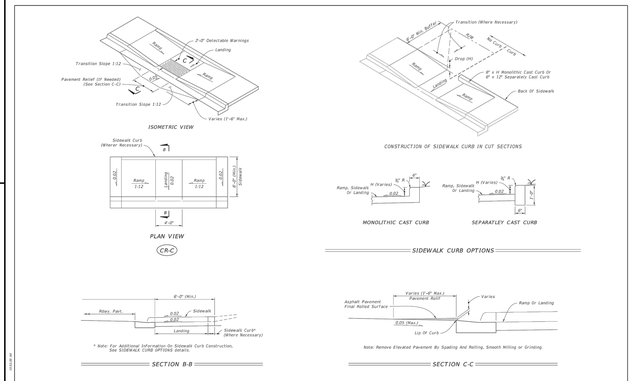


OPTION A OPTION B

DETECTABLE WARNING ON FLUSH SHOULDER SIDEWALKS

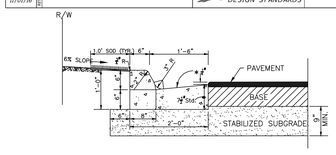
CURB RAMPS WITHOUT SIDEWALKS AND FLUSH SHOULDER SIDEWALKS

LAST REVISION 11/01/16	DESCRIPTION:	FDOT FY 2017-18 DESIGN STANDARDS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX NO. 304	SHEET NO. 6 of 8



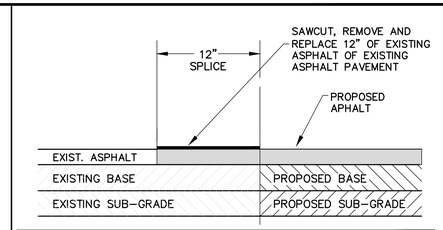
SIDEWALK CURB RAMPS CR-C AND SIDEWALK CURB

LAST REVISION 11/01/16	DESCRIPTION:	FDOT FY 2017-18 DESIGN STANDARDS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX NO. 304	SHEET NO. 3 of 8

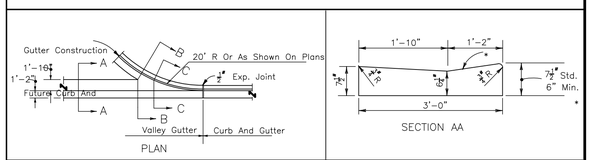


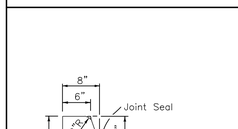
TYPE "F" CURB

- When used on high side of roadways, the cross slope of the gutter shall match the cross slope of the adjacent pavement. The thickness of the lip shall be 6", unless otherwise shown on plans.

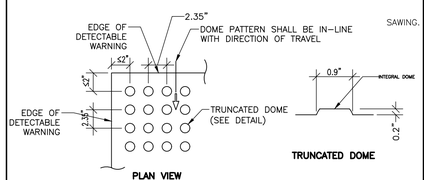


ASPHALT SPLICE DETAIL





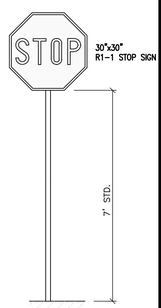
TYPE D



PLAN VIEW

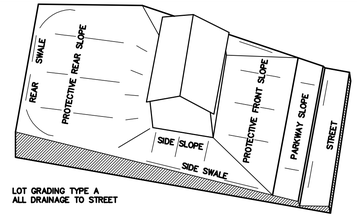
ALL SIDEWALK CURB RAMPS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL. MUST BE FLORIDA BUILDING CODE 2004 FOR ALL ON-SITE.

TRUNCATED DOME DETAILS
N.T.S.

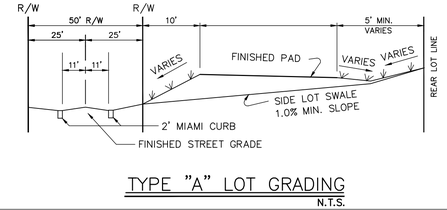


STOP SIGN
N.T.S

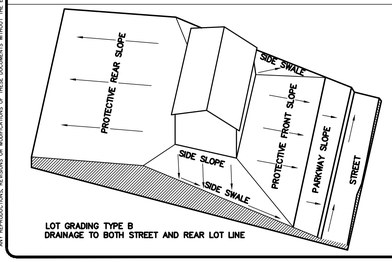
NOTE: ALL BACK OF SIGNS SHALL BE PAINTED BLACK



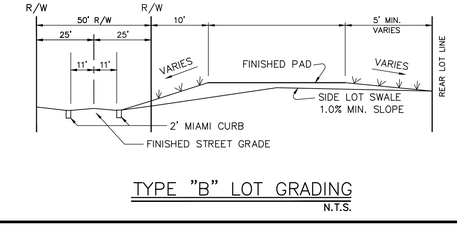
LOT GRADING TYPE A
ALL DRAINAGE TO STREET



TYPE "A" LOT GRADING
N.T.S.



LOT GRADING TYPE B
DRAINAGE TO BOTH STREET AND REAR LOT LINE



TYPE "B" LOT GRADING
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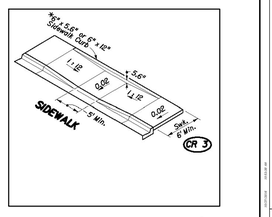


TYPICAL SIDEWALK CURB RAMP DETAILS FDOT #304
N.T.S.



TYPICAL NO PARKING SIGN
N.T.S.

PAVEMENT SPECIFICATIONS (SN=2.46):

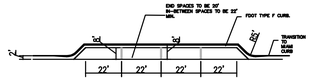
A.) MINIMUM 1.5" TYPE 'SP-9.5' OR 'SP-12.5' ASPHALT OVER RC-70 OR EQUAL PRIME COAT.

B.) MINIMUM 6" LBR 100 LIMEROCK COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-180 OR ANY APPROVED ALTERNATE BASE COURSE PER TABLE 5.6 OF THE FDOT FLEXIBLE PAVEMENT MANUAL AND SECTIONS 285, 911, AND 200 OF FDOT STANDARDS AND SPECIFICATIONS MANUAL LATEST EDITION AND ARTICLE IV OF THE OSCEOLA COUNTY ROAD CONSTRUCTION SPECIFICATIONS AND PER LDC 4.4.5.A AND 4.4.5.G.

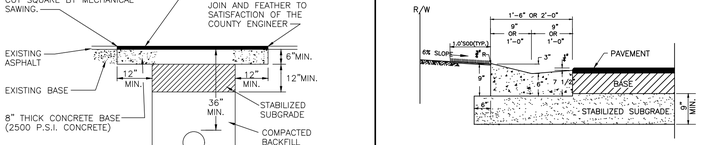
C.) MIN. 9" STABILIZED SUB-BASE COMPACTED TO MINIMUM 98% DENSITY OF MOD. PROCTOR AS DETERMINED BY SHTO-T-180 OR LBR > 40.

SIDEWALK SPECIFICATIONS:

D.) 4" THICK CLASS NS CONCRETE MEETING 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI



TYPICAL PARALLEL PARKING SPACING



ALL BACKFILLING SHALL BE DONE WITH SUITABLE MATERIAL, TAMPED IN LAYERS NOT TO EXCEED 6", IN ACCORDANCE WITH DIVISION OF TRANSPORTATION'S SPECIFICATIONS.

PAVEMENT REPAIR DETAIL

STANDARD CONCRETE MIAMI CURB

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DATE	BY	REVISIONS			

8 BROADWAY, SUITE 104, KISSIMMEE, FLORIDA 34741-5708
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ENGINEERING, SURVEYING AND PLANNING
Hanson, Walter & Associates, Inc.

HARVEST GROVE ⚠
PRELIMINARY SUBDIVISION PLAN

TYPICAL SECTIONS AND MISCELLANEOUS DETAILS

SHEET Nº 06 of 09
JOB Nº 5557-01

PSP25-0002
PUD24-00005
CPA24-00009
ANX24-00006

I:\5557-01\ENGINEERING\CADD\PLANS\Preliminary Site Plan\55557-01 MISCELLANEOUS DETAILS PSP.dwg • Jun 10, 2025-3:21pm • plotted by BMillion

LENNAR

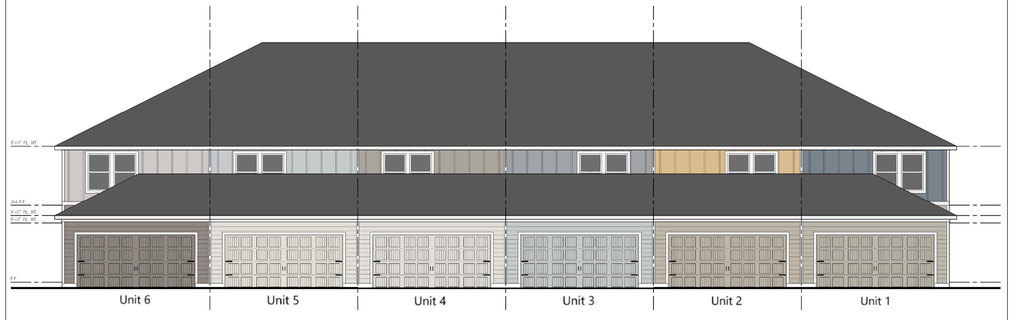
Harvest Grove - 20ft Alley Loaded



6-Plex Building - Front Elevation

LENNAR

Harvest Grove - 20ft Alley Loaded



6-Plex Building - Rear Elevation

LENNAR

Harvest Grove - 20ft Alley Loaded



Unit 1



Unit 6

6-Plex Building - Right and Left Elevation

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			DATE	BY	REVISIONS		

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ENGINEERING, SURVEYING AND PLANNING
Hanson, Walter & Associates, Inc.

HARVEST GROVE ⚠
PRELIMINARY SUBDIVISION PLAN

BUILDING ELEVATIONS (1)

SHEET Nº 07 of 09
JOB Nº 5557-01

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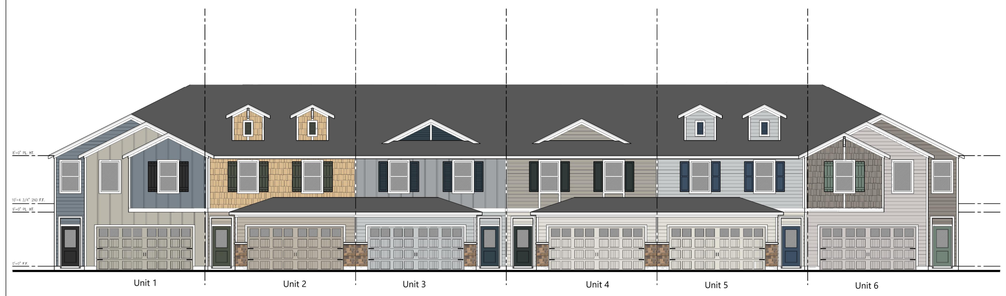
LENNAR

Harvest Grove - 25ft Front Loaded



6-Plex Building - Front Elevation

LENNAR

Harvest Grove - 25ft Front Loaded



6-Plex Building - Rear Elevation

LENNAR

Harvest Grove - 25ft Front Loaded





6-Plex Building - Side Elevation

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CPA24–00009
ANX24–00006

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			DATE	BY	REVISIONS

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ENGINEERING, SURVEYING AND PLANNING
Hanson, Walter & Associates, Inc.

HARVEST GROVE ⚠
PRELIMINARY SUBDIVISION PLAN

BUILDING ELEVATIONS (2)

SHEET Nº 08 of 09
JOB Nº 5557-01

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GENERAL CONSTRUCTION NOTES:

1. 1. ALL ELEVATIONS REFER TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29) OR NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AS SHOWN ON THE COVER SHEET.
2. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES AFFECTING THIS WORK PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL CHECK THE PLANS FOR CONFLICTS AND DISCREPANCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE OWNER'S ENGINEER OF ANY CONFLICTS OR DISCREPANCIES BEFORE PERFORMING ANY WORK IN THE AFFECTED AREA.
4. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE VARIOUS UTILITY COMPANIES. IN ORDER TO PERMIT MARKING THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES IN ADVANCE OF CONSTRUCTION, CALL "SUNSHINE" AT 1-800-432-4770. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITIES NOT ONLY THOSE INCLUDED IN THE "SUNSHINE" PROGRAM.
5. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES (ABOVE OR BELOW GROUND) THAT MAY OCCUR AS A RESULT OF THE WORK PREFORMED BY THE CONTRACTOR.
6. ALL UNDERGROUND UTILITIES MUST BE IN PLACE AND TESTED OR INSPECTED PRIOR TO BASE AND SURFACE CONSTRUCTION.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS OF THE VARIOUS GOVERNMENTAL AGENCIES. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION AND SCHEDULE INSPECTIONS ACCORDING TO AGENCY INSTRUCTION.
8. ALL SPECIFICATIONS AND DOCUMENTS REFERRED TO SHALL BE OF LATEST REVISIONS AND/OR LATEST EDITION.
9. ALL WORK PERFORMED SHALL COMPLY WITH THE REGULATIONS AND ORDINANCES OF THE GOVERNING MUNICIPALITY COUNTY, THE UTILITY PROVIDED, THE CITY, FDOT AND WATER MANAGEMENT DISTRICT AS APPLICABLE BY JURISDICTION.
10. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE OWNER'S ENGINEER, SHOP DRAWINGS ON ALL PRECAST AND MANUFACTURED ITEMS, WHICH ARE FOR THIS SITE. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE. ALL SHOP DRAWINGS ARE TO BE REVIEWED AND APPROVED BY THE CONTRACTOR PRIOR TO SUBMITTAL TO THE OWNER'S ENGINEER.
11. AT LEAST FIVE (5) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND APPROPRIATE AGENCIES AND SUPPLY THEM WITH ALL REQUIRED SHOP DRAWINGS, THE CONTRACTOR'S NAME, STARTING DATE, PROJECTED SCHEDULE AND OTHER INFORMATION AS REQUIRED. ANY WORK PERFORMED PRIOR TO NOTIFYING THE ENGINEER, OR WITHOUT AGENCY INSPECTORS PRESENT, MAY BE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
12. WORK PREFORMED UNDER THIS CONTRACT SHALL INTERFACE SMOOTHLY WITH OTHER WORK BEING PERFORMED ON SITE BY OTHER CONTRACTORS AND UTILITY COMPANIES. IT WILL BE NECESSARY FOR THE CONTRACTOR TO COORDINATE AND SCHEDULE HIS ACTIVITIES, WHERE NECESSARY, WITH OTHER CONTRACTORS AND UTILITY COMPANIES.
13. BACKFILL MATERIAL SHALL BE SOLIDLY TAMPED AROUND PIPES IN 6" LAYERS UP TO A LEVEL OF AT LEAST ONE FOOT ABOVE THE TOP OF THE PIPE. IN AREAS TO BE PAVED, BACKFILL SHALL BE COMPACTED TO 100% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.
14. SITE WORK CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF AT LEAST 3,000 P.S.I. IN 28 DAYS, UNLESS OTHERWISE NOTED.
15. REINFORCING SHALL BE BILLET STEEL BARS CONFORMING TO ASTM A615 GRADE OR BETTER.
16. ALL PRIVATE AND PUBLIC PROPERTY AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN EXISTING CONDITIONS UNLESS SPECIFICALLY EXEMPTED BY THE PLANS. ADDITIONAL COSTS ARE INCIDENTAL TO OTHER CONSTRUCTION AND NO EXTRA COMPENSATION IS TO BE ALLOWED.
17. ALL DISTURBED AREAS WHICH ARE NOT TO BE SODDED, ARE TO BE SEEDED AND MULCHED TO DOT STANDARDS AND MAINTAINED UNTIL A SATISFACTORY STAND OF GRASS ACCEPTABLE TO THE REGULATORY AGENCY AND ENGINEER OF RECORD, HAVE BEEN OBTAINED. ANY WASHOUT, REGRADING, RESEEDING AND GRASSING WORK, AND OTHER EROSION WORK REQUIRED WILL BE PERFORMED BY THE CONTRACTOR, UNTIL THE SYSTEM IS ACCEPTED FOR MAINTENANCE BY THE REGULATORY AGENCY AND ENGINEER OF RECORD.
18. CHAPTER 77-153 OF THE FLORIDA STATUTES REQUIRES THAT AN EXCAVATOR NOTIFY ALL GAS UTILITIES A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO EXCAVATING. MAPS SHOW ONLY THE APPROXIMATE LOCATION OF GAS MAINS AND DO NOT SHOW SERVICE LINES. THE ONLY SAFE AND PROPER WAY TO LOCATE EITHER MAINS OR SERVICE LINES IS BY AN ON-SITE PRESENCE BY THE RESPECTIVE GAS PERSONNEL. THEREFORE, EXCAVATORS ARE INSTRUCTED TO TELEPHONE THE RESPECTIVE GAS COMPANY TWO (2) WORKING DAYS BEFORE ENTERING A CONSTRUCTION AREA.
19. THE CONTRACTOR SHALL LOCATE AND FLAG ALL PROPERTY CORNERS PRIOR TO FINAL ENGINEERING INSPECTION AND CERTIFICATION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE PROPERTY CORNERS, WHICH HAVE BEEN LOST DURING CONSTRUCTION, RE-ESTABLISHED BY A PROFESSIONAL LAND SURVEYOR.
20. THE CONTRACTOR IS TO REVIEW THE SOIL REPORTS AND BORINGS PRIOR TO BIDDING THE PROJECT AND COMMENCING CONSTRUCTION.
21. THE IRRIGATION SYSTEM SHALL HAVE COLOR CODED PIPING AND LABELING ON THE PIPE TO INSURE DIFFERENTIATION FROM POTABLE WATER PIPING.
22. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE APPROVED PLANS AND PERMITS AT THE CONSTRUCTION SITE.
23. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MEANS AND METHODS FOR CONSTRUCTION SITE SAFETY.
24. ALL SODDING, SEEDING AND MULCHING SHALL INCLUDE WATERING AND FERTILIZATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THESE AREAS UNTIL THE PROJECT IS COMPLETED AND ACCEPTED BY THE OWNER.
25. THE PERMITTEE SHALL BE SEPARATELY RESPONSIBLE FOR APPROPRIATE CONSTRUCTION, DISINFECTION AND TESTING BEYOND THE METER TO ASSURE POTABILITY AT THE POINT OF USE.
26. POTABLE WATER PIPES WILL BE DISINFECTED IN ACCORDANCE WITH AWWA SPECIFICATIONS C651.
27. POTABLE WATER PIPES WILL BE HYDROSTATICALLY TESTED IN ACCORDANCE WITH SPECIFICATION NUMBERS C600 AND C605/M23 FOR DUCTILE IRON AND PVC PIPES, RESPECTIVELY.
28. ALL BUFFER WALL ELEVATIONS MUST COMPLY TO LAND DEVELOPMENT CODE 10.9.A.P. BUFFER WALL SHALL BE A MINIMUM OF 6' IN HEIGHT AS MEASURED FROM THE BASE FLOOR ELEVATION OF THE MOST ADJACENT BUILDING, ROAD OR PROPERTY, WHICHEVER IS GREATER.
29. ALL SIGNAGE IS FOR INFORMATIONAL PURPOSES ONLY. ALL SIGNAGE REQUIRES A SEPARATE BUILDING PERMIT SUBMITTAL WITH COUNTY STAMPED APPROVED EIP SITE AND DRAINAGE SHEET.
30. CONTRACTOR SHALL COORDINATE ALL UTILITY AND DRAINAGE CONNECTIONS TO AND FROM BUILDINGS WITH THE ARCHITECT AND MECHANICAL ENGINEER.
31. TRASH COMPACTOR, IF SHOWN, AND THE ACCOMPANYING DETAILS ARE SHOWN FOR REFERENCE ONLY. STRUCTURAL DESIGN SHALL BE BY OTHERS.

CLEARING AND EROSION CONTROL NOTES:

1. PRIOR TO ANY SITE CLEARING, ALL TREES SHOWN TO REMAIN ON THE CONSTRUCTION PLANS SHALL BE PROTECTED IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY'S TREE ORDINANCE AND DETAILS CONTAINED IN THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THESE TREES IN GOOD CONDITION. NO TREES SHOWN TO REMAIN SHALL BE REMOVED WITHOUT WRITTEN APPROVAL FROM THE OWNER.
2. THE CONTRACTOR IS TO PREPARE THE SITE PRIOR TO BEGINNING ACTUAL CONSTRUCTION IN ACCORDANCE WITH THE SOILS TESTING REPORT. COPIES OF THE SOILS REPORT ARE AVAILABLE THROUGH THE OWNER OR THE SOILS TESTING COMPANY. QUESTIONS REGARDING SITE PREPARATION REQUIREMENTS DESCRIBED IN THE SOILS REPORT ARE TO BE DIRECTED TO THE SOILS TESTING COMPANY.
3. THE CONTRACTOR SHALL CLEAR AND GRUB ONLY THOSE PORTIONS OF THE SITE NECESSARY FOR CONSTRUCTION. DISTURBED AREAS WILL BE SEEDED, MULCHED OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL IMMEDIATELY FOLLOWING CONSTRUCTION.
4. THE TOP 4" TO 6" OF GROUND REMOVED DURING CLEARING AND GRUBBING SHALL BE STOCKPILED AT A SITE DESIGNATED BY THE OWNER TO BE USED FOR LANDSCAPING PURPOSES, UNLESS OTHERWISE DIRECTED BY THE OWNER.
5. ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH APPLICABLE REGULATIONS. ONLY "GRADING BY HAND" IS PERMITTED WITHIN THE CANOPY LINE OF TREES THAT ARE TO REMAIN.
6. THE CONTRACTOR IS TO OBTAIN ALL NECESSARY PERMITS FOR REMOVING ANY EXISTING STRUCTURES.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES TO DISCONNECT OR REMOVE THEIR FACILITIES PRIOR TO REMOVING OR DEMOLISHING ANY EXISTING STRUCTURES FROM THE SITE.
8. THE LOCATION OF ANY EXISTING TREES SHOWN ON THE PLANS HAS BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND IS GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ACCURACY. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE COUNTY AND THE ENGINEER TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATION OF THESE UTILITIES WITH THE OWNER OF THE UTILITY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING ANY UNDERGROUND UTILITY, WHETHER SHOWN ON THE PLANS OR LOCATED BY THE UTILITY COMPANY. ALL UTILITIES WHICH INTERFACE WITH THE PROPOSED CONSTRUCTION SHALL BE RELOCATED BY THE RESPECTIVE UTILITY COMPANIES, AND THE CONTRACTOR SHALL COOPERATE WITH THE UTILITY COMPANIES DURING RELOCATION OPERATIONS. ANY DELAY OR INCONVENIENCE CAUSED TO THE CONTRACTOR BY THE VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED.
9. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAKING A VISUAL INSPECTION OF THE SITE AND WILL BE RESPONSIBLE FOR THE DEMOLITION AND REMOVAL OF ALL UNDERGROUND AND ABOVE GROUND STRUCTURES THAT WILL NOT BE INCORPORATED INTO THE NEW FACILITIES. SHOULD ANY DISCREPANCIES EXIST WITH THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING THE OWNER AND REQUESTING A CLARIFICATION OF THE PLANS PRIOR TO DEMOLITION.
10. DURING CONSTRUCTION, ALL STORM SEWER INLETS IN THE VICINITY OF THE PROJECT SHALL BE PROTECTED BY SEDIMENT TRAPS SUCH AS SECURED HAY BALES, SOD, STONE, ETC., WHICH SHALL BE MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION PROGRESS.
11. ALL EROSION AND SILTATION CONTROL METHODS SHALL BE IMPLEMENTED PRIOR TO THE START OF CONSTRUCTION AND MAINTAINED UNTIL CONSTRUCTION IS COMPLETE.
12. WHEN CONSTRUCTION IS COMPLETED, THE RETENTION/DETENTION AREAS WILL BE RESHAPED, CLEANED OF SILT, MUD AND DEBRIS AND RE-SODDED IN ACCORDANCE TO THE PLANS.
13. CONTRACTOR IS TO PROVIDE EROSION CONTROL/SEDIMENTATION BARRIER (HAY BALES OR SILTATION CURTAIN) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS, WATERWAYS AND EXISTING WETLANDS. IN ADDITION, THE CONTRACTOR SHALL PLACE STRAW, MULCH OR OTHER SUITABLE MATERIAL ON THE GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT THE SITE. IF, IN THE OPINION OF THE ENGINEER AND/OR THE COUNTY/CITY/STATE, EXCESSIVE QUANTITIES OF EARTH ARE TRANSFERRED OFF-SITE EITHER BY NATURAL DRAINAGE OR BY VEHICULAR TRAFFIC, THE CONTRACTOR IS TO CLEAN AND RESTORE THE AREA TO THE SATISFACTION OF THE ENGINEER AND/OR THE JURISDICTIONAL AGENCY.
14. IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION OR OTHER ACCEPTABLE METHODS.
15. THERE IS TO BE NO DISCHARGE (e.g. PUMPING, SHEET FLOW, SWALE, DITCH, ETC.) INTO EXISTING LAKE SYSTEM, WETLAND, OR RIVER WITHOUT THE USE OF SETTLING PONDS. IF THE CONTRACTOR DESIRES TO DISCHARGE INTO THE EXISTING LAKE SYSTEM OR RIVER, A SETTLING POND PLAN MUST BE SUBMITTED AND APPROVED BY THE ENGINEER OF RECORD, COUNTY AND THE MANAGEMENT DISTRICT PRIOR TO CONSTRUCTION.
16. THE SURFACE AREA OF OPEN, RAW, ERODIBLE SOIL EXPOSED BY CLEARING AND GRUBBING OPERATIONS OR EXCAVATION AND FILLING OPERATIONS, SHALL NOT EXCEED TEN (10) ACRES WITHOUT WRITTEN AUTHORIZATION FROM THE COUNTY/CITY ENGINEER.

PAVING, GRADING AND DRAINAGE NOTES:

1. ALL DELETERIOUS SUBSTANCE MATERIAL (e.g. MUCK, PEAT, BURIED DEBRIS) IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS OR AS DIRECTED BY THE OWNER'S ENGINEER OR OWNER'S SOIL TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER. EXCAVATED AREAS ARE TO BE BACKFILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHEETING OR SHORING AS NECESSARY. TRENCHES SHALL BE KEPT DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED. DEWATERING SHALL BE USED AS REQUIRED.
3. IT MAY BE NECESSARY TO FIELD ADJUST PAVEMENT ELEVATIONS TO PRESERVE THE ROOT SYSTEMS OF TREES SHOWN TO BE SAVED. THE CONTRACTOR IS TO COORDINATE WITH OWNER'S ENGINEER PRIOR TO ANY ELEVATION CHANGES.
4. PRIOR TO CONSTRUCTING CONCRETE PAVEMENT, THE CONTRACTOR IS TO SUBMIT A PROPOSED JOINTING PATTERN TO THE OWNER'S ENGINEER FOR APPROVAL.
5. THE CONTRACTOR IS TO PROVIDE A 1/2" BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER, AT ABUTMENT OF CONCRETE AND ANY STRUCTURE.
6. ALL PAVEMENT MARKINGS SHALL BE MADE WITH PERMANENT THERMOPLASTIC AND SHALL CONFORM TO FDOT INDEX 711-001. PARKING STALL STRIPING TO BE 4" WIDE PAINTED WHITE STRIPES.
7. THE CONTRACTOR IS TO INSTALL EXTRA BASE MATERIAL WHEN THE DISTANCE BETWEEN THE PAVEMENT ELEVATION AND THE TOP OF THE PIPE OR BELL IS LESS THAN TWELVE (12) INCHES. SEE "EXTRA BASE FOR CROSS CULVERTS UNDER FLEXIBLE PAVEMENT DETAIL".
8. STANDARD INDEXES REFER TO THE LATEST EDITION OF FDOT "ROADWAY AND TRAFFIC DESIGN STANDARDS".
9. ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE CLASS III (ASTM C-76) OR APPROVED EQUAL UNLESS OTHERWISE NOTED ON PLANS. ALL DRAINAGE PIPE JOINTS SHALL BE WRAPPED IN FILTER FABRIC WRAP PER FDOT INDEX 430-001.
10. PVC STORM PIPE (12" AND SMALLER) SHALL CONFORM TO AWWA C900, CLASS 150 STANDARDS UNLESS OTHERWISE NOTED.
11. PIPE LENGTHS SHOWN ARE APPROXIMATE AND TO THE CENTER OF DRAINAGE STRUCTURES. PIPE LENGTH FOR MITERED END AND FLARED END SECTIONS ARE TO END OF PIPE.
12. ALL DRAINAGE STRUCTURE GRATES AND COVERS WITHIN TRAFFIC AREAS SHALL BE TRAFFIC RATED FOR H-20 LOADINGS.
13. THE CONTRACTOR IS TO SOD THE RETENTION/DETENTION POND AS INDICATED ON PLANS WITHIN ONE-WEEK FOLLOWING CONSTRUCTION OF THE POND.
14. MATERIALS AND CONSTRUCTION METHODS FOR STREETS AND STORM DRAINAGE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE COUNTY ROADWAY SPECIFICATIONS LATEST EDITION AND THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST REVISION THEREOF AND SUPPLEMENTAL SPECIFICATIONS THERETO.
15. UNDERCUTTING AND/OR OVER EXCAVATING THE RETENTION/DETENTION AREAS WILL NOT BE ALLOWED.
16. THE CONTRACTOR SHALL PROVIDE CERTIFIED RECORD DRAWINGS, SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR. THE RECORD DRAWINGS SHALL SHOW FINAL GRADES, INVERTS AND LOCATIONS OF ALL STORMWATER FACILITIES INCLUDING THE STORMWATER POND, DRAINAGE STRUCTURES, BERMS & SWALES. THE CONTRACTOR SHALL PROVIDE TEN COPIES OF THE CERTIFIED RECORD DRAWINGS TO THE ENGINEER FOR THE PURPOSE OF CERTIFYING THE STORMWATER MANAGEMENT SYSTEM.

2023 – TOHOPEKALIGA WATER AUTHORITY STANDARD CONSTRUCTION NOTES

GENERAL:

1. CONSTRUCT UTILITIES IN ACCORDANCE TO TOHO APPROVED PLANS AND SHOP DRAWINGS. ANY DEVIATION FROM THE APPROVED PLANS SHALL BE APPROVED BY THE DEVELOPER'S ENGINEER AND TOHO.
2. A PRE-CONSTRUCTION MEETING WITH THE TOHO'S STAFF IS REQUIRED PRIOR TO INITIATING CONSTRUCTION.
3. ALL REQUIRED PERMITS SHALL BE OBTAINED PRIOR TO INITIATING CONSTRUCTION.
4. A MINIMUM 12 FOOT WIDE ACCESS ROAD SHALL BE PROVIDED FOR ALL TOHO OWNED UTILITIES, WHICH ARE LOCATED OUTSIDE OF ROADWAYS. THE TOP 8" OF THE ACCESS ROAD SHALL BE STABILIZED TO A FLORIDA BEARING VALUE OF 75 PSI, AND COMPACTED TO 98% OF AASHTO T-180.
5. PIPE DEFLECTION CANNOT EXCEED 50% OF THE PIPE MANUFACTURER'S RECOMMENDATION.
6. REFERENCE TOHO'S STANDARDS, SPECIFICATIONS AND DETAILS, LATEST EDITION FOR ISSUES NOT SPECIFICALLY ADDRESSED BELOW OR ON THE TOHO ACCEPTED CONSTRUCTION PLANS.
7. CURRENT EDITION OF TOHO'S STANDARDS, SPECIFICATIONS AND DETAILS, AT TIME OF TOHO PLAN ACCEPTANCE SHALL SUPERSEDE ACCEPTED PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE TOHO STANDARDS, SPECIFICATIONS AND DETAILS ARE ADHERED TO IN CONSTRUCTION.

PERMITS, PLANS, SHOP DRAWINGS:

1. PERMITS OR LETTERS OF DETERMINATION FROM FDEP SHALL BE OBTAINED FOR THE SANITARY SEWER COLLECTION SYSTEM AND WATER DISTRIBUTION SYSTEM PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. A STAMPED APPROVED SET OF PLANS BY TOHO SHALL BE PRESENT ON THE SITE AT ALL TIMES. APPROVED PLANS ARE VALID FOR 12 MONTHS FROM THE DATE OF APPROVAL. IF CONSTRUCTION DOES NOT BEGIN WITHIN THE 12 MONTH PERIOD, THE DEVELOPER MUST CONTACT TOHO FOR A PROJECT STATUS REVIEW AND APPROVAL EXTENSION.
3. SHOP DRAWINGS FOR ALL WATER, REUSE, AND SANITARY SEWER MATERIALS AND STRUCTURES SHALL BE SUBMITTED TO TOHO PRIOR TO INITIATING CONSTRUCTION.
4. INSTALLATION OF MATERIALS AND/OR STRUCTURES PRIOR TO SHOP DRAWING APPROVAL IS DONE AT THE CONTRACTOR'S OWN RISK.
5. TWO HARD COPIES AND ONE ELECTRONIC COPY OF RECORD DRAWINGS SHALL BE SUBMITTED TO TOHO BEFORE THE FINAL INSPECTION.

RECORD DRAWINGS SHALL CONFORM TO SECTIONS 11.6 OF TOHO'S STANDARDS, SPECIFICATIONS AND DETAILS, LATEST EDITION.

POTABLE WATER AND REUSE WATER – TESTING:

1. WATER LINE SHALL BE INSTALLED, CLEANED, FLUSHED, DISINFECTED AND BACTERIOLOGICALLY TESTED AND CLEARED FOR SERVICE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND FDEP RULES AND REGULATIONS.
   ALL WATER DISTRIBUTION SYSTEMS SHALL BE FLUSHED CLEAN OF ALL DELETERIOUS MATERIAL PRIOR TO ANY TESTING. LINES 4" AND GREATER SHALL BE PIGGED.
2. WATER LINE SHALL BE PRESSURE TESTED IN ACCORDANCE WITH AWWA-C600 (DUCTILE IRON PIPE) AND AWWA-C605/M23 (PVC PIPE) SPECIFICATIONS AT 150 PSI AND WITNESSED BY TOHO PERSONNEL. NO LEAKAGE SHALL BE ALLOWED.
3. ALL TAPPING SADDLES AND SLEEVES SHALL BE PRESSURE TESTED AT 150 PSI AND WITNESSED BY TOHO PERSONNEL PRIOR TO INITIATING THE TAP.
4. ALL WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH THE LATEST VERSION OF AWWA C651 AND WITNESSED BY TOHO PERSONNEL.
5. ALL BACTERIOLOGICAL SAMPLES SHALL BE WITNESSED BY TOHO PERSONNEL.

WATER – MATERIALS:

1. PVC PIPE: FOUR (4) INCHES THROUGH TWELVE (12) INCHES SHALL BE AWWA C-900, LATEST EDITION. FOURTEEN (14) INCHES THROUGH THIRTY-SIX (36) INCHES SHALL BE AWWA C-905, LATEST EDITION.
2. DIP PIPE: FOUR (4)" THROUGH FIFTY-FOUR (54)" SHALL BE ANSI/AWWA A21.51/C151 WITH A MINIMUM WORKING PRESSURE CLASS 150 PIPE. ANY FITTINGS REQUIRED SHALL BE MECHANICAL JOINT DUCTILE IRON CONFORMING TO ANSI/AWWA A21.10/C110, 250 PSI MINIMUM PRESSURE RATING, OR DUCTILE IRON COMPACT FITTINGS IN ACCORDANCE WITH ANSI/AWWA A21.53/C153.
   JOINTS FOR DUCTILE IRON PIPE SHALL BE PUSH-ON OR MECHANICAL JOINTS CONFORMING TO ANSI/AWWA A21.11/C111. ABOVE GROUND JOINTS SHALL BE FLANGED WITH STAINLESS STEEL BOLTS, NUTS AND WASHERS/ FLANGED JOINTS SHALL CONFORM TO ANSI STANDARD B 16.1-125LB.
   WHERE DUCTILE IRON PIPE AND FITTINGS ARE TO BE BELOW GROUND OR INSTALLED IN A CASING PIPE THE COATING SHALL BE A MINIMUM 1.0 MIL THICK IN ACCORDANCE WITH ANSI/AWWA A21.51/C151.
   WHERE DUCTILE IRON PIPE AND FITTINGS ARE TO BE INSTALLED ABOVE GROUND, PIPE, FITTINGS AND VALVES SHALL BE THOROUGHLY CLEANED AND GIVEN ONE FIELD COAT (MINIMUM 1.5 MILS DRY THICKNESS) OF RUST INHIBITOR PRIMER, AND TWO FINISH COATS (MINIMUM 1.5 MILS DRY THICKNESS EACH).
   ALL DUCTILE IRON PIPE AND FITTINGS SHALL HAVE AN INTERIOR PROTECTIVE LINING OF CEMENT-MORTAR WITH A SEAL COAT OF ASPHALTIC MATERIAL IN ACCORDANCE WITH ANSI/AWWA A21.4/C104.
   THE PIPE SHALL BE POLYETHYLENE ENCASED (8 MIL) WHERE SHOWN ON THE PLANS, IN ACCORDANCE WITH ANSI/AWWA A21.51/C105.
3. POLYETHYLENE PIPE: FOUR (4)" THROUGH TWELVE (12)" SHALL BE AWWA STANDARD C906, PE3408 LATEST EDITION. THE POLYETHYLENE PIPE SHALL HAVE A MINIMUM WORKING PRESSURE RATING OF 160 PSI AND SHALL HAVE A STANDARD DIMENSION RATIO (SDR) OF 11. PIPE SHALL BE THE SAME ID AS DUCTILE IRON PIPE.
   POLYETHYLENE PIPE SHALL HAVE FUSION BONDED JOINTS.
   FITTINGS USED WITH POLYETHYLENE PIPE SHALL BE FUSION FITTINGS IN ACCORDANCE WITH AWWA STANDARD C906.
4. SERVICE PIPES: ALL SERVICE LINES SHALL BE ¾", 1", 1-1/2" OR 2" BLUE FOR POTABLE WATER AND PURPLE FOR REUSE WATER, PC200, SDR9, POLYETHYLENE TUBING CONFORMING TO SPECIFICATIONS IN AWWA C901, PE3608. 4" AND LARGER SERVICE PIPE SHALL BE C-900 PVC OR DIP. 3" SERVICE PIPE SHALL NOT BE PERMITTED.
5. VALVES SHALL BE RESILIENT WEDGE GATE VALVES.
6. VALVES SHALL BE LOCATED AT NOT MORE THAN 500 FOOT INTERVALS IN COMMERCIAL, INDUSTRIAL AND HIGH DENSITY RESIDENTIAL AREAS AND AT NOT MORE THAN 1000 FOOT INTERVALS IN ALL OTHER AREAS. APPROPRIATE VALVING SHALL ALSO BE PROVIDED ON ALL SIDES OF TEES AND CROSSES AND ON BOTH SIDES OF A DIRECTIONAL BORE OR JACK AND BORE.
7. ALL METERS SHALL BE INSTALLED BY TOHO AFTER ALL PAYMENT OF APPLICABLE FEES AND CHARGES. ALL METERS 2" AND LESS IN SIZE SHALL BE INSTALLED UNDERGROUND IN AN APPROVED METER BOX. METERS LARGER THAN 2" SHALL BE INSTALLED ABOVE GROUND. IN GENERAL, METERS 2 INCH AND LARGER SHALL BE LOCATED IN A METER EASEMENT LOCATED ADJACENT TO THE PUBLIC RIGHT OF WAY AND OUTSIDE OF PAVED AREAS.

SEWER – TESTING:

PRIOR TO ANY TESTING TO BE WITNESSED, ALL PASSING SOIL DENSITY TESTS AND SLOPE SURVEYS SHALL BE SUBMITTED TO THE TOHO ENGINEER AND OT THE TOHO INSPECTOR.

1. ALL SANITARY MANHOLES SHALL BE INSPECTED BY TOHO PERSONNEL.
2. SANITARY SEWER SHALL BE VIDEO INSPECTED AND WITNESSED BY TOHO PERSONNEL IN ACCORDANCE WITH THE TOHO STANDARDS, SPECIFICATIONS, AND DETAILS MANUAL, LATEST EDITION.
3. SANITARY SEWERS SHALL BE LOW PRESSURE AIR TESTED WITH NO ALLOWABLE LOSS AND WITNESSED BY TOHO PERSONNEL.
4. GRAVITY SANITARY SEWER MAINS SHALL REQUIRE A MANDREL TEST WHICH SHALL BE WITNESSED BY THE TOHO INSPECTOR IN ACCORDANCE WITH THE TOHO STANDARDS, SPECIFICATIONS, AND DETAILS MANUAL, LATEST EDITION.

GRAVITY SEWER – MATERIALS:

1. PVC PIPE: FOUR (4) INCHES THROUGH FIFTEEN (15)" SHALL BE ASTM D3034, SDR 35. THE JOINTS SHALL BE INTEGRAL BELL ELASTOMERIC GASKET JOINTS MANUFACTURED IN ACCORDANCE WITH ASTM D3212 AND ASTM F477/ APPLICABLE UNI-BELL PLASTIC PIPE ASSOCIATION STANDARD IS UNI B-4.
   PVC PIPE: EIGHTEEN (18)" THROUGH TWENTY-SEVEN (27)" SHALL BE ASTM F679, SDR35. THE JOINTS SHALL BE INTEGRAL BELL ELASTOMERIC GASKET JOINTS MANUFACTURED IN ACCORDANCE WITH ASTM D3212 AND ASTM F477/ APPLICABLE UNI-BELL PLASTIC PIPE ASSOCIATION STANDARD IS UNI B-7.
   ALL PVC PIPE SHALL BEAR THE NSF-DW SEAL. THE MINIMUM STANDARD LENGTH OF PIPE SHALL BE THIRTEEN (13) FEET. PVC PIPE WITH LESS THAN 15 FT OF COVER SHALL BE SDR 35; 15 TO 20 FT SHALL BE SDR 26; AND 20 TO 30 FT SHALL BE SDR 18.
2. DIP PIPE: ANSI/AWWA A21.51/C151, CLASS THICKNESS DESIGNED PER ANSI/AWWA A21.50/C150, WITH FLANGE JOINTS. AN INTERIOR PROTECTIVE LINING OF "PROTECTO 401" EPOXY, OR EQUAL, WITH A MINIMUM DRY FILM THICKNESS 40MILS. DIP SHALL ONLY BE USED ON ABOVE GROUND PIPE AT SANITARY LIFT STATIONS.
3. JOINT MATERIALS:
   -PVC SEWER PIPE JOINTS SHALL BE FLEXIBLE ELASTOMERIC SEALS PER ASTM D3212.
   -JOINTS BETWEEN PIPES OF DIFFERENT MATERIALS SHALL BE MADE WITH A RIGID, PVC, ADAPTOR COUPLING. FERNCO ADAPTERS SHALL ONLY BE PERMITTED WHEN TRANSITIONING BETWEEN CLAY PIPE AND PVC.

SEWER FORCE MAINS – TESTING:

1. FORCE MAIN PIPING SHALL BE INSTALLED AND PIGGED UNTIL CLEAN.
2. FORCE MAIN SHALL BE PRESSURE TESTED IN ACCORDANCE WITH AWWA-C600 (DUCTILE IRON PIPE) AND AWWA-C605/M23 (PVC PIPE) SPECIFICATIONS AT 100 PSI OR 1.5 TIMES THE OPERATING PRESSURE, WHICHEVER GREATER FOR A MINIMUM OF 2 HOURS AND WITNESSED BY TOHO PERSONNEL. NO LEAKAGE SHALL BE ALLOWED.

SEWER FORCE MAINS – MATERIALS:

1. PVC PIPE: FOUR (4)" THROUGH TWELVE (12)" SHALL BE AWWA STANDARD C900 AND A DIMENSION RATIO (DR) OF 25.
   PVC PIPE SHALL BE INTEGRAL BELL, PUSH-ON TYPE JOINTS.
2. DIP PIPE: FOUR (4)" THROUGH FIFTY-FOUR (54)" SHALL BE ANSI/AWWA A21.51/C151 WIT

HARDSCAPE SCHEDULE

CODE	DESCRIPTION	QTY	DETAIL	MANUFACTURER /SUPPLIER	PRODUCT NAME	COLOR	NOTES	SIZE		
BUFFERS										
BU-01	6' TALL VINYL FENCE	894 LF	A / HP201	DANIELLE FENCE	CEF MAXWELL VINYL FENCE	ALMOND	INSTALLED PER MANUF. SPECIFICATIONS	72" HEIGHT		
CODE	DESCRIPTION	QTY	DETAIL	MANUFACTURER / SUPPLIER	PRODUCT NAME	MATERIAL	COLOR	FINISH	SIZE	NOTES
DOG PARK										
DP-04	DOG PARK GATE	4	D / HP202	OSCEOLA FENCE SUPPLY, INC.	DOG PARK DOUBLE ENTRY/EXIT	ALUMINUM CHAIN LINK	BLACK	POWDER COAT	6` HEIGHT X 8` OPENING	CONTACT: INFO@OSCEOLAFENCESUPPLY.COM
DP-05	SHADE SAIL	3	C / HP201	LANDSCAPE STRUCTURES	SKYWAYS HIP (35X35) SHADE SAIL #215186	ALUMINUM POSTS AND SHADE SAIL FABRIC PER MANUF.	NAVY BLUE SAIL	POWDER COAT	36`X36`	CONTACT: MARY LANGLEY, MARY@REPSERVICES.COM, 407-947-6318
DP-06	DOG PARK MAINTENANCE GATE	2	E / HP202	OSCEOLA FENCE SUPPLY, INC.	12` WIDE DOUBLE GATE	CHAIN LINK	BLACK	POWDER COAT	6` HEIGHT X 12` OPENING	CONTACT: INFO@OSCEOLAFENCESUPPLY.COM
DP-07	DOG PARK FENCE	533 LF	A / HP202	OSCEOLA FENCE SUPPLY, INC.	6` CHAIN LINK FENCE	ALUMINUM	CONTACT: INFO@OSCEOLAFENCESUPPLY.COM	BLACK	SEE DETAIL	6`-0" TALL
DP-08	DOG WATERING STATION	2	B / HP202	DOG-ON-IT PARKS	#7213 DOG WATERING STATION	STEEL	OR EQUAL APPROVED BY LANDSCAPE ARCHITECT	GREEN	STAINLESS	32" HEIGHT
DP-09	DOG WASTE STATION	2	C / HP202	DOG-ON-IT PARKS	#7408S COMPLETE DOG WASTE STATION - ONEPUL	ALUMINUM	OR EQUAL APPROVED BY LANDSCAPE ARCHITECT	GREEN	POWDER COAT	72" HEIGHT
DP-10	SMALL DOG PARK PLAY EQUIPMENT	1	A / HP205	THE PARK AND FACILITIES CATALOG	SMALL DOG KIT	METAL/POLY	NATURAL TAN AND GREEN	PER MANUF.	PER MANUF.	INSTALL THROUGHOUT DOG PARK PER MANUF. SPECIFICATIONS
DP-11	LARGE DOG PARK PLAY EQUIPMENT	1	A / HP205	THE PARK AND FACILITIES CATALOG	NOVICE DOG PARK	METAL/POLY	NATURALTAN AND GREEN	PER MANUF.	PER MANUF.	INSTALL THROUGHOUT DOG PARK PER MANUF. SPECIFICATIONS
PROJECT ENTRANCE										
EN-101	MONUMENT SIGN	1	A / HP207	TBD	TBD	TBD	TBD	TBD	TBD	SEE HARDSCAPE DETAILS
FURNISHINGS										
FN-04	BENCH	9	A / HP204	LANDSCAPE FORMS	PARC VUE BENCH PCVU-B-72-EA-F	ALUMINUM	STEEL METALLIC	POWDER COAT	72"	INSTALLED ON CONCRETE PAD PER MANUFACTURER`S SPECIFICATIONS
FN-06	GRETCHEN PICNIC TABLE	4	B / HP201	LANDSCAPE FORMS	GRETCHEN PICNIC TABLE GRCHN-F-PY	STEEL AND COMPOSITE	STEEL METALLIC	BARK POLYSITE TABLETOP	54"	FREESTANDING
FN-07	HEALTHBEAT CHEST/BACK PRESS	1	C / HP208	LANDSCAPE STRUCTURES	MODEL #192456	PER MANUF.	PEBBLE	PROSHIELD FINISH	SEE HARDSCAPE DETAILS	CONTACT: MARY LANGLEY, MARY@REPSERVICES.COM, 407-947-6318
FN-08	HEALTHBEAT AB CRUNCH/LEG LIFT	1	B / HP208	LANDSCAPE STRUCTURES	MODEL #192451	PER MANUF.	PEBBLE	PROSHIELD FINISH	SEE HARDSCAPE DETAILS	CONTACT: MARY LANGLEY, MARY@REPSERVICES.COM, 407-947-6318
FN-09	HEALTHBEAT CARDIO STEPPER	2	A / HP208	LANDSCAPE STRUCTURES	MODEL #192455	PER MANUF.	PEBBLE	PROSHIELD FINISH	SEE HARDSCAPE DETAILS	CONTACT: MARY LANGLEY, MARY@REPSERVICES.COM, 407-947-6318
LIFT STATION										
LS-01	LIFT STATION GATE	1	C / HP201	OSCEOLA FENCE SUPPLY, INC.	DOUBLE ENTRY/EXIT SWING GATE	ALUMINUM CHAIN LINK	BLACK	POWDER COAT	12`-0" WIDE	ADD FABRIC PRIVACY SCREEN PER DETAIL
LS-02	LIFT STATION FENCE	200 LF	B / HP201	OSCEOLA FENCE SUPPLY, INC.	6` CHAIN LINK FENCE	ALUMINUM CHAIN LINK	BLACK	POWDER COAT	6`-0" TALL	ADD FABRIC PRIVACY SCREEN PER DETAIL
MAIL AREA										
M-01	MAILBOX KIOSK	1	A / HP206	SEE DETAIL	N/A	ALUMINUM/STEEL TUBING	PER DETAIL	POWDERCOAT	PER DETAIL	INSTALLED ON CONCRETE PAD
PLAYGROUND										
PL-06	SINGLE SWING GATE	1	A / HP203	OSCEOLA FENCE SUPPLY, INC.	SINGLE SWING GATE	ALUMINUM	WHITE	POWDERCOAT	SEE DETAIL	CONTACT: INFO@OSCEOLAFENCESUPPLE.COM
PL-11	AGE 5-12 PLAYGROUND	SEE EQUIP LIST	A / HP209	LANDSCAPE STRUCTURES	SEE PLAYGROUND EQUIPMENT LIST	TBD	TBD	TBD	49`-6" X 46`-9" OVERALL	CONTACT: MARY LANGLEY, MARY@REPSERVICES.COM, 407-947-6318
PL-12	AGE 2-12 SWINGS	SEE EQUIP LIST	A / HP209	LANDSCAPE STRUCTURES	SEE PLAYGROUND EQUIPMENT LIST	TBD	TBD	TBD	37`-9" X 34`-0" OVERALL	CONTACT: MARY LANGLEY, MARY@REPSERVICES.COM, 407-947-6318
PL-13	PLAYGROUND FENCE	193 LF	A / HP203	OSCEOLA FENCE SUPPLY, INC.	48" PICKET FENCE	ALUMINUM	WHITE	POWDERCOAT	48" HEIGHT	CONTACT: INFO@OSCEOLAFENCESUPPLY.COM
PL-14	PLAYGROUND SAFETY SURFACING	3,513 SF	B / HP203	IRVINE WOOD RECOVERY	`SAFETY FIRST` PLAYGROUND TURF	ENGINEERED WOOD MULCH FIBER	NATURAL BROWN	PER MANUFACTURER	PER MANUFACTURER	CONTACT: INFO@IRVINEWOODRECOVERY.COM, 513-831-0060
PL-16	PLAYGROUND ACCESS RAMP	1	B / HP209	LANDSCAPE STRUCTURES	TUFFTIMBER ACCESS RAMP #130799	PER MANUFACTURER	BLACK	PER MANUFACTURER	5`	CONTACT: MARY LANGLEY, MARY@REPSERVICES.COM, 407-947-6318

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CLIENT:

HANSON WALTER & ASSOCIATES, INC.

8 BROADWAY #104
KISSIMMEE, FL 34741

PROJECT:

HARVEST GROVE TOWNHOMES

LOCATION:

1820, 1850 & 1860
PUFFIN ROAD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

SEAL:

REVISIONS	DATE
1	05-06-2025
2	06-09-2025

DESIGNED BY:	RJK
DRAWN BY:	RJK
CHECKED BY:	KAV
DATE:	03-07-2025

PROJECT NUMBER: 5557

SHEET TITLE:

HARDSCAPE SCHEDULE

SHEET NUMBER:

HP001

PROPERTY LINE (TYP.)

DOG PARK FENCE (TYP) DP-07

GRETCHEN PICNIC TABLE (TYP) FN-06

SHADE SAIL DP-05

DOG PARK MAINTENANCE GATE (TYP) DP-06

SMALL DOG PARK PLAY EQUIPMENT DP-10

LARGE DOG PARK PLAY EQUIPMENT DP-11

DOG PARK GATE (TYP) DP-04

DOG WASTE STATION (TYP) DP-09

DOG WATERING STATION (TYP) DP-08

PL-12 AGE 2-12 SWINGS

DP-05 SHADE SAIL

FN-08 HEALTHBEAT AB CRUNCH/LEG LIFT ON CONCRETE PAD

FN-09 HEALTHBEAT CARDIO STEPPER ON CONCRETE PAD

FN-04 BENCH ON CONCRETE PAD

DP-05 SHADE SAIL

PL-14 PLAYGROUND SAFETY SURFACING

PL-11 AGE 5-12 PLAYGROUND

PL-13 PLAYGROUND FENCE

PL-16 ACCESS RAMP

PL-06 SINGLE SWING GATE

DP-09 DOG WASTE STATION (TYP)

LIFT STATION GATE LS-01

LIFT STATION FENCE LS-02

773.44'

BU-01 6' TALL PRIVACY FENCE

MAILBOX KIOSK M-01

MATCHLINE 1
MATCHLINE 3

MATCHLINE 1
MATCHLINE 2

STORMWATER MANAGEMENT POND. SEE CIVIL ENGINEERING PLANS.

TOP OF BANK (TYP.)

CONCRETE WALKING PATHS. SEE CIVIL ENGINEERING PLANS (TYP.)

STABILIZED WALKING PATHS. SEE CIVIL ENGINEERING PLANS AND HARDSCAPE DETAILS (TYP.)

LIFT STATION. SEE CIVIL ENGINEERING PLANS .

SHEET KEY SCALE: 1"=200'-0"

1 2 3 4 5 6 7 8

Know what's below. Call before you dig. Dial 811 Or Call 800-282-7411

SCALE: 1" = 20'

20 0 10 20 40

NORTH

CLIENT:

HANSON WALTER & ASSOCIATES, INC.

8 BROADWAY #104
KISSIMMEE, FL 34741

PROJECT:

HARVEST GROVE TOWNHOMES

LOCATION:

1820, 1850 & 1860
PUFFIN ROAD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

SEAL:

REVISIONS	DATE
1	05-06-2025
2	06-09-2025

DESIGNED BY:	RJK
DRAWN BY:	RJK
CHECKED BY:	KAV
DATE:	03-07-2025

PROJECT NUMBER: 5557

SHEET TITLE:

HARDSCAPE PLAN

SHEET NUMBER:

HP101

PROPERTY LINE (TYP.)

FN-07 HEALTHBEAT CHEST/BACK PRESS ON CONCRETE PAD

BENCH ON CONCRETE PAD FN-04

STORMWATER MANAGEMENT POND. SEE CIVIL ENGINEERING PLANS.

MATCHLINE 1

MATCHLINE 2

TOP OF BANK (TYP.)

BENCH ON CONCRETE PAD FN-04

CONCRETE WALKING PATHS. SEE CIVIL ENGINEERING PLANS (TYP.)

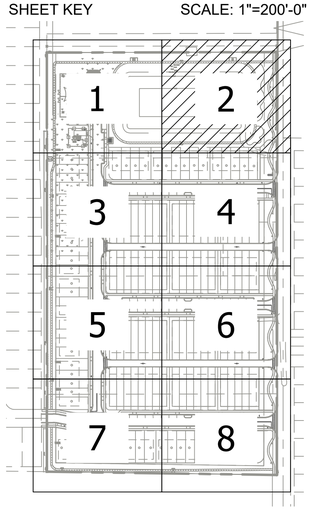
BENCH ON CONCRETE PAD FN-04

MATCHLINE 2

MATCHLINE 4

SHEET KEY

SCALE: 1"=200'-0"



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HARVEST GROVE TOWNHOMES

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CHECKED BY:	KAV
DATE:	03-07-2025

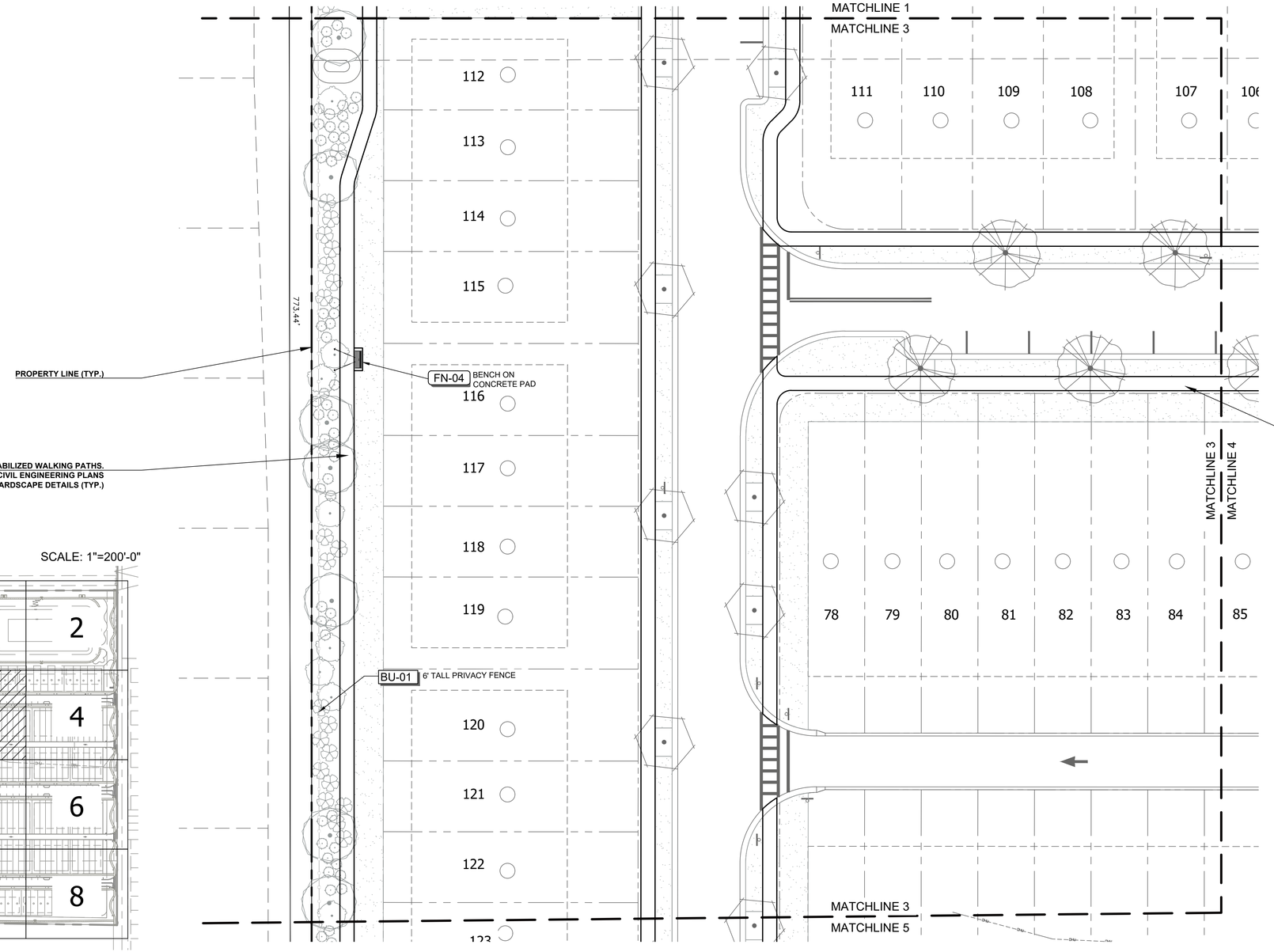
PROJECT NUMBER: 5557

SHEET TITLE:

HARDSCAPE PLAN

SHEET NUMBER:

HP102



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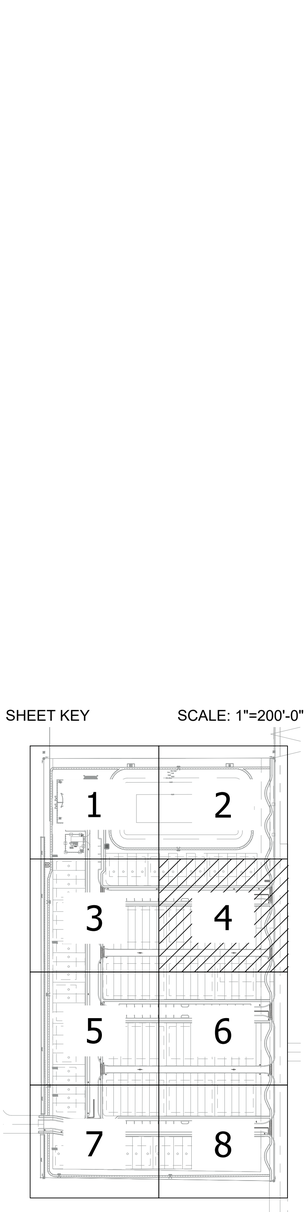
SHEET TITLE:

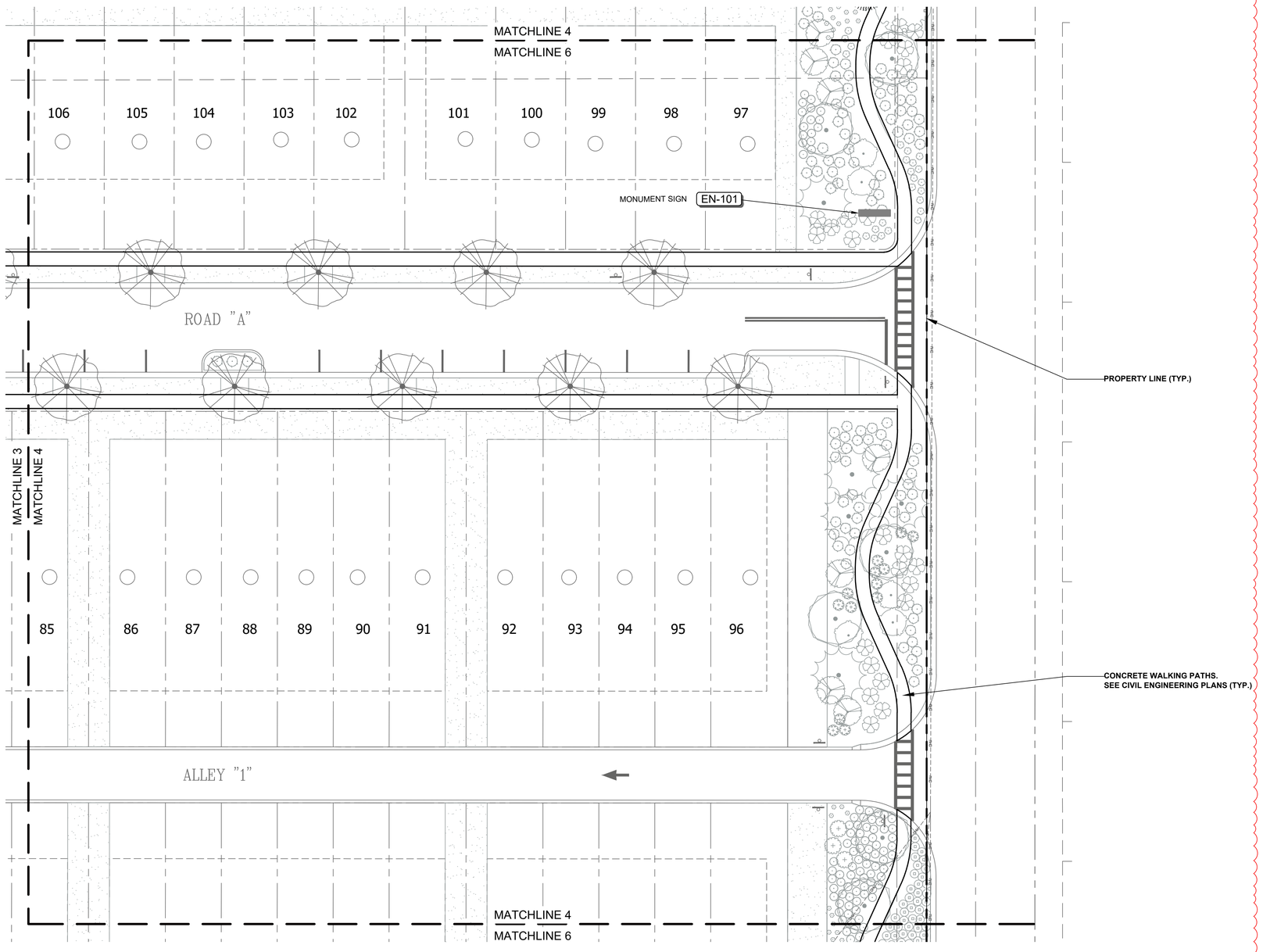
HARDSCAPE PLAN

SHEET NUMBER:

HP103



SCALE: 1"=200'-0"



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Or Call 800-282-7411

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SCALE: 1" = 20'

NORTH

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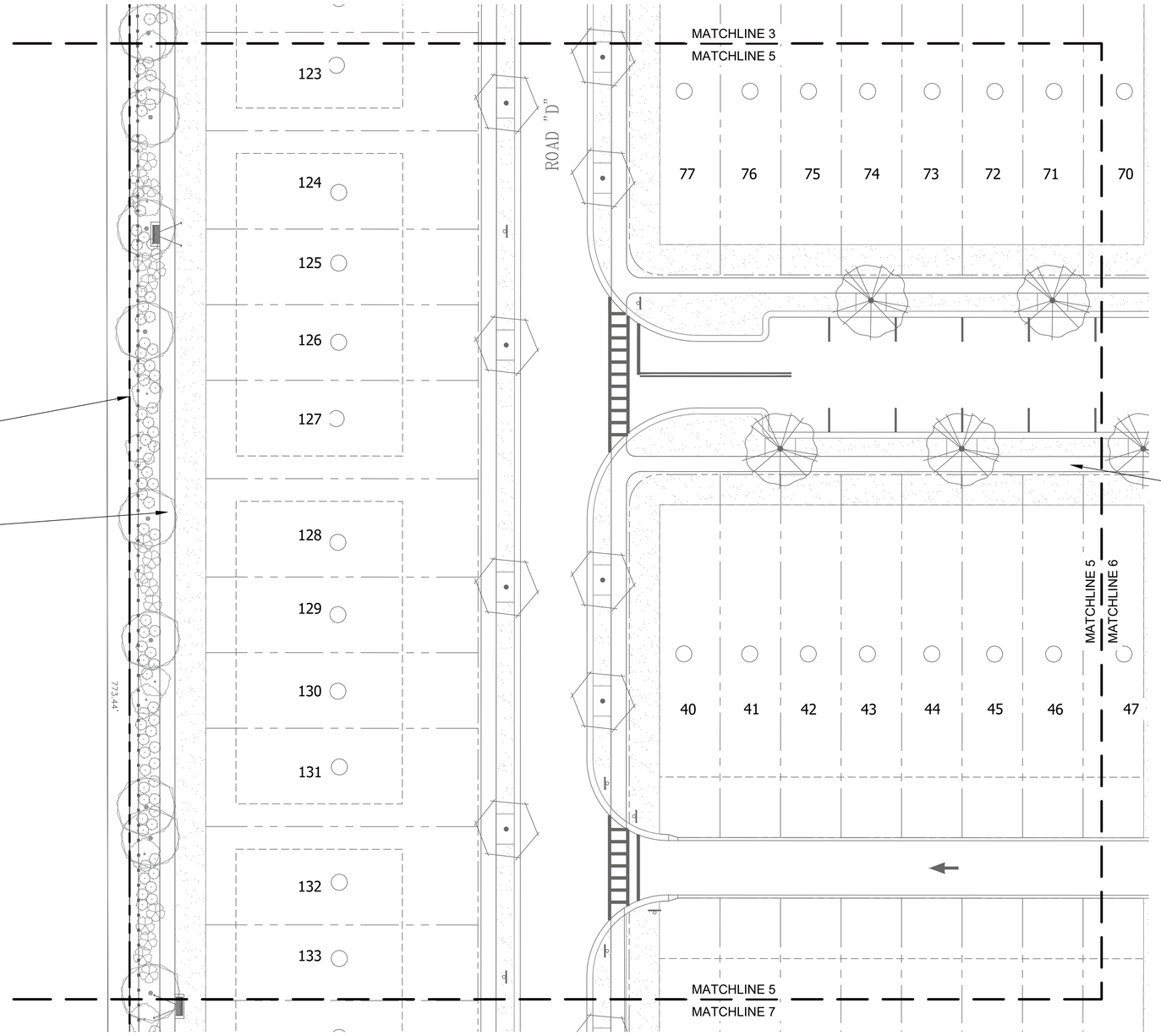
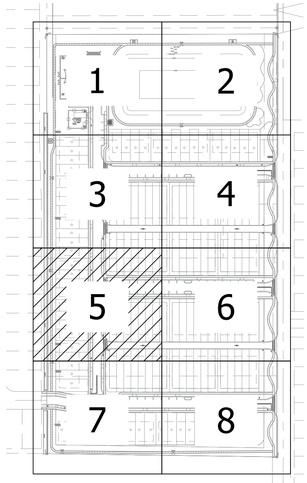
HARDSCAPE PLAN

SHEET NUMBER:

HP104



SHEET KEY



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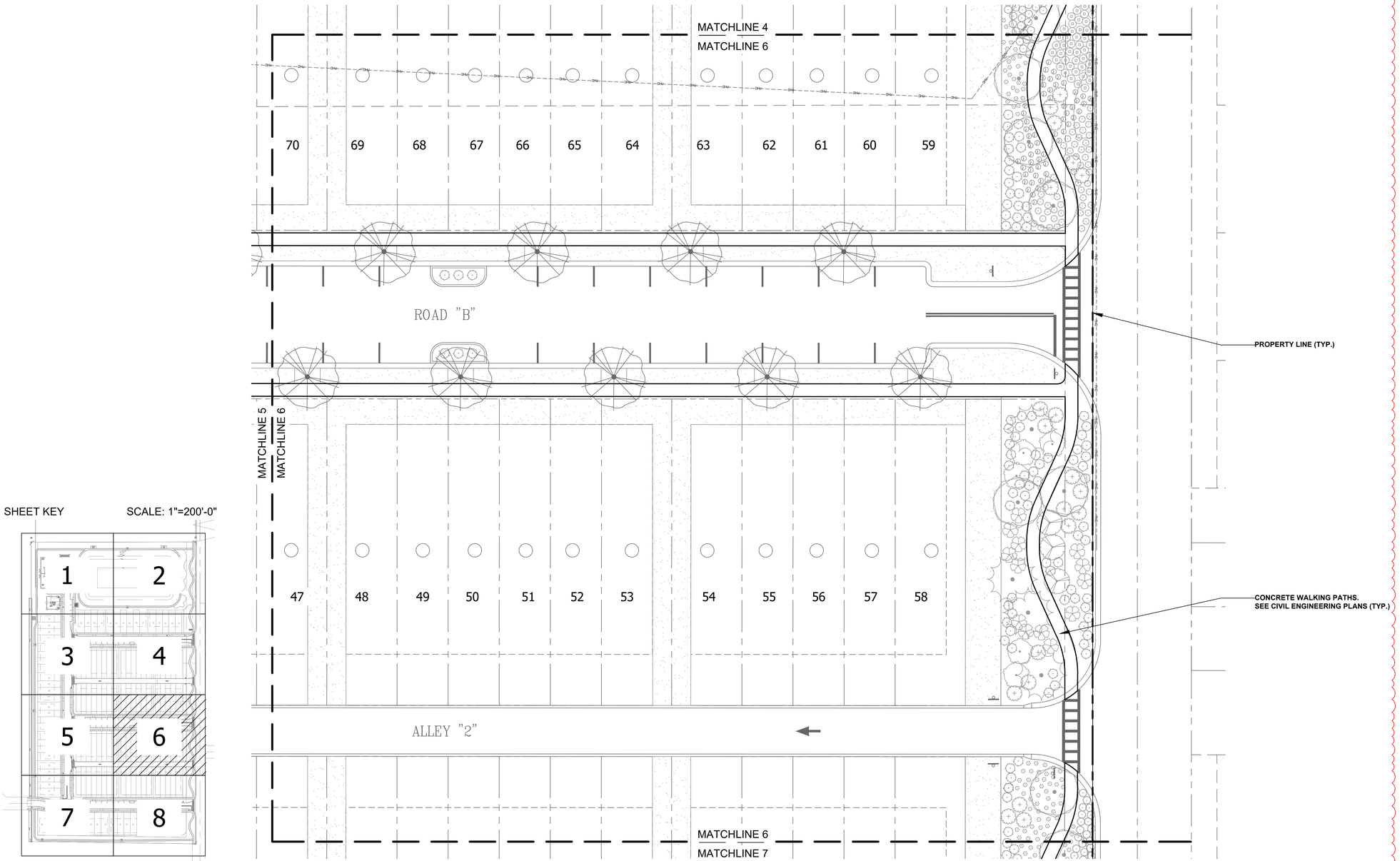
HP105



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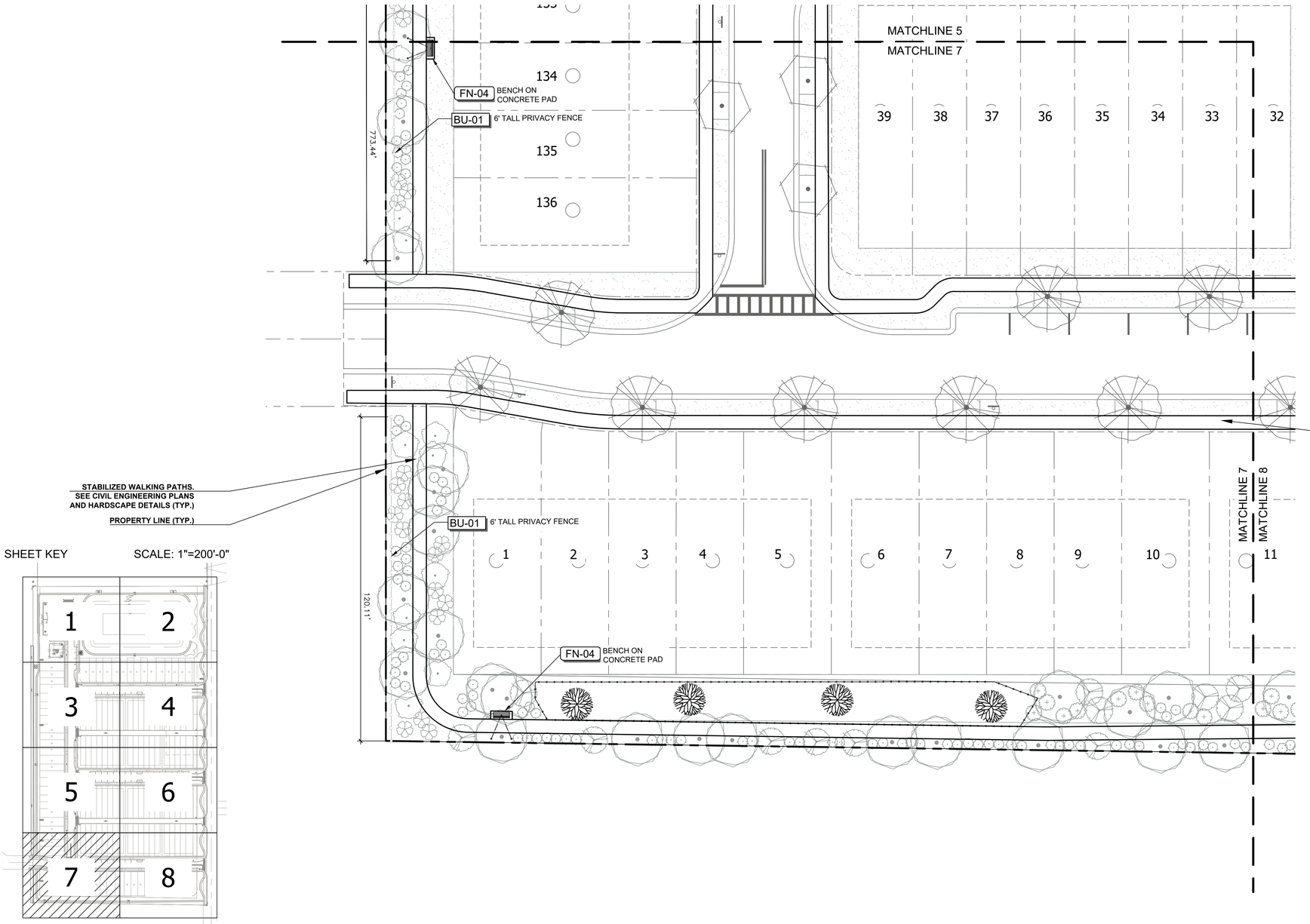
HARDSCAPE PLAN

SHEET NUMBER:

HP106



SHEET KEY

SCALE: 1"=200'-0"

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SCALE: 1" = 20'

NORTH

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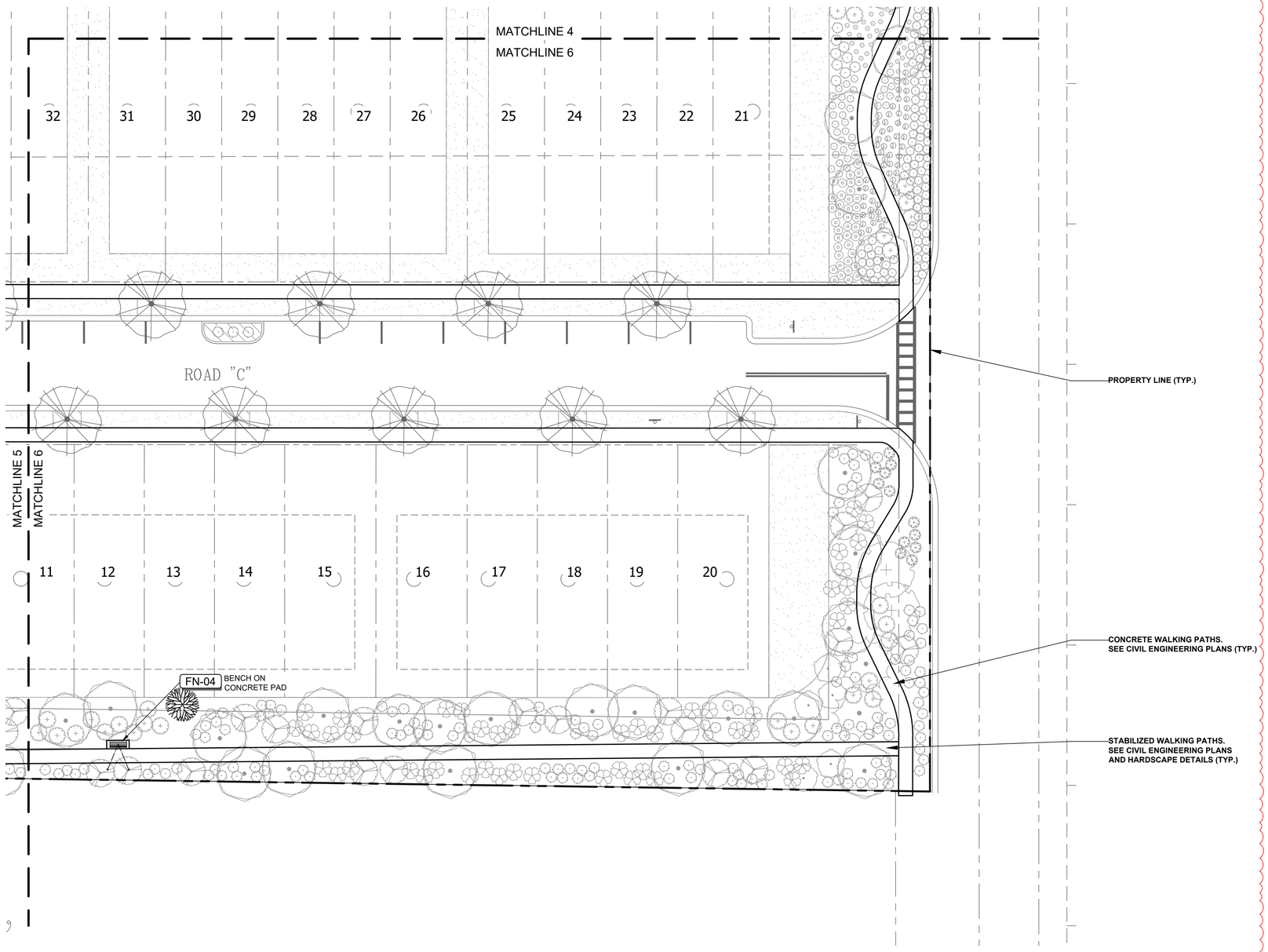
SHEET TITLE:

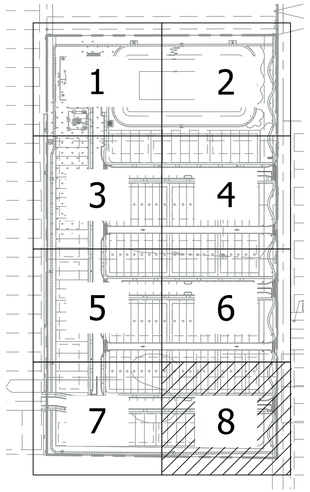
HARDSCAPE PLAN

SHEET NUMBER:

HP107



SHEET KEY SCALE: 1"=200'-0"



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NORTH

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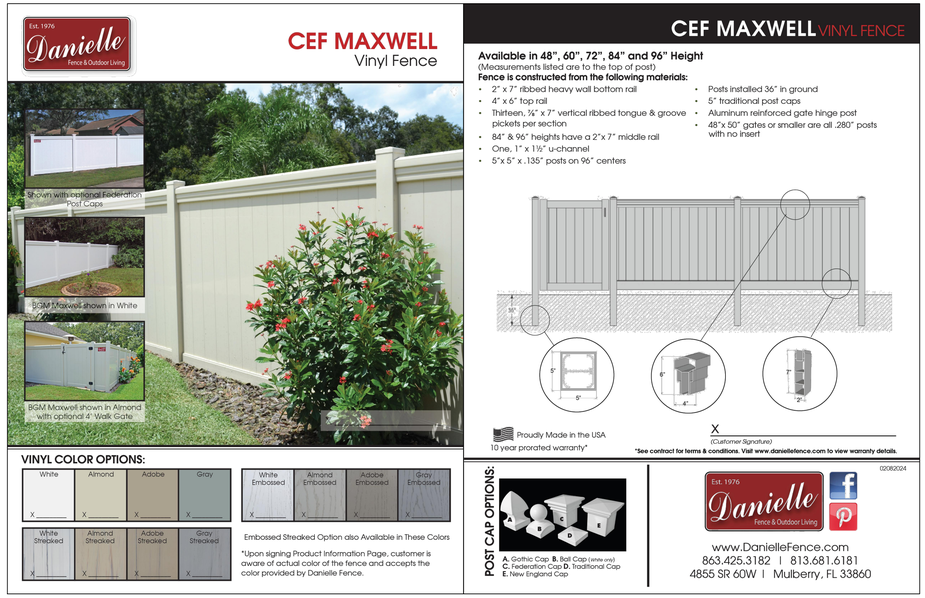
SHEET TITLE:

HARDSCAPE PLAN

SHEET NUMBER:

HP108

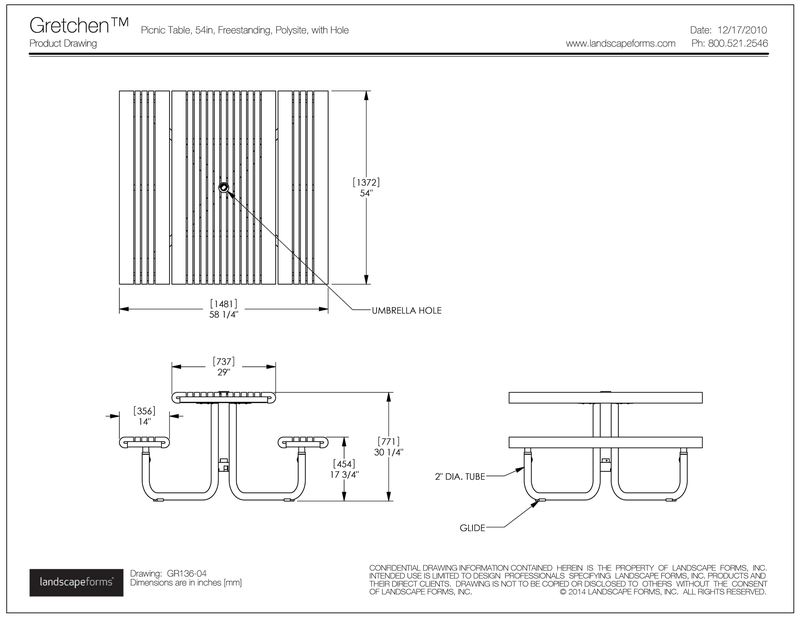


6' TALL VINYL FENCE

QTY: 894 L.F.
COLOR: ALMOND

N.T.S.

A

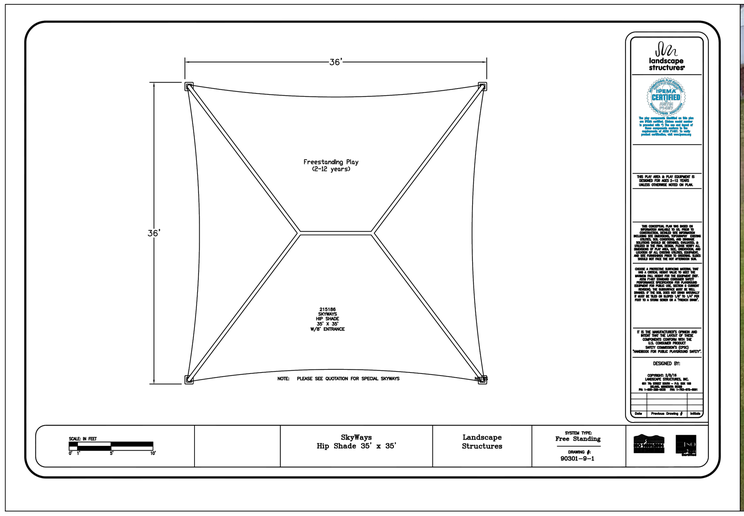


GRETCHEN PICNIC TABLE

QTY: 4

N.T.S.

B





SHADE SAIL

N.T.S.

QTY: 3

C

CONTACT:
MARY LANGLEY
CUSTOMER SERVICE REPRESENTATIVE
MARY@REPSERVICES.COM
PHONE: 407-947-6318

CLIENT:

HANSON WALTER & ASSOCIATES, INC.

8 BROADWAY #104
KISSIMMEE, FL 34741

PROJECT:

HARVEST GROVE TOWNHOMES

LOCATION:

1820, 1850 & 1860
PUFFIN ROAD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

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1	05-06-2025
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CHECKED BY:	KAV
DATE:	03-07-2025

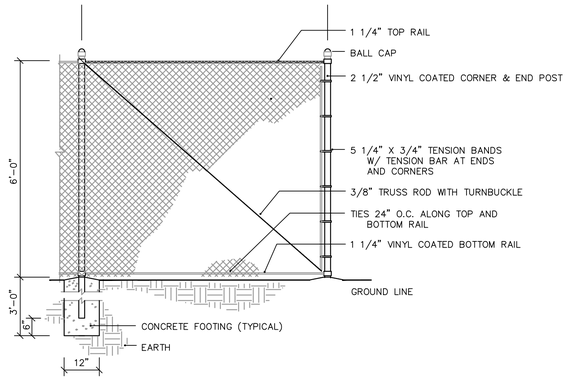
PROJECT NUMBER: 5557

SHEET TITLE:

HARDSCAPE DETAILS

SHEET NUMBER:

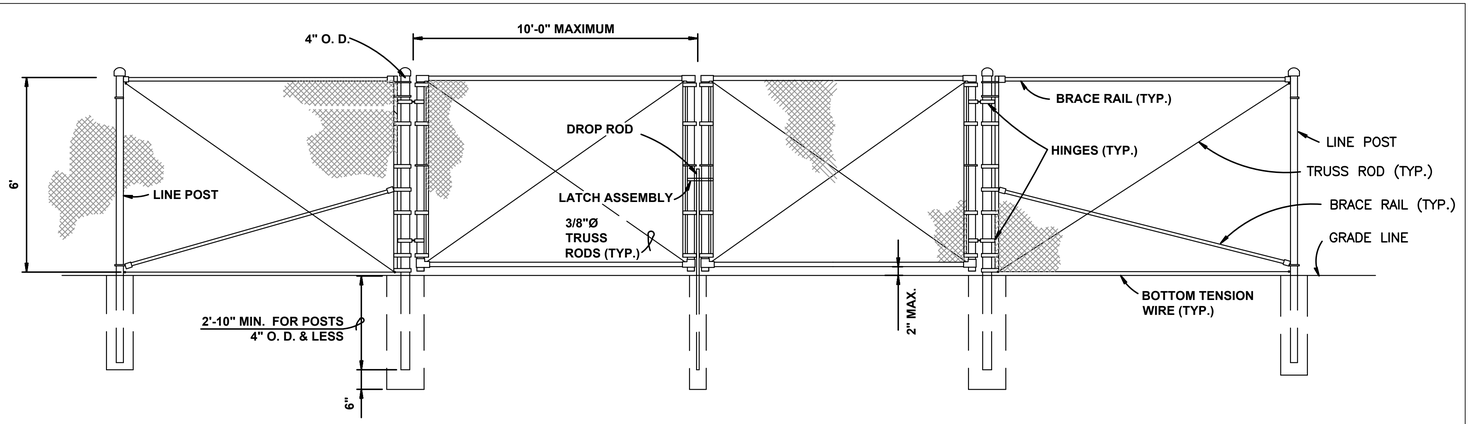
HP201



DOG PARK FENCE - SECTION

N.T.S.

A.1



DOG PARK FENCE - ELEVATION

N.T.S.

A.2



DOG WATERING STATION

N.T.S.

QTY: 2

B

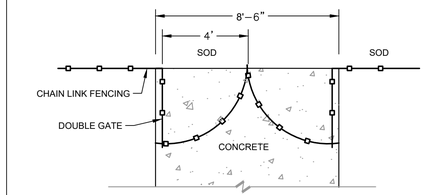


DOG WASTE STATION

N.T.S.

QTY: 2

C



CHAIN LINK FENCING DOUBLE GATE. COLOR: BLACK. INSTALLATION TO MEET MANUFACTURER AND ASTM STANDARDS.

MANUFACTURER: OSCEOLA FENCE SUPPLY, INC.
CONTACT: INFO@OSCEOLAFENCESUPPLY.COM
PHONE: (407) 744-0828
WEBSITE: WWW.OSCEOLAFENCESUPPLY.COM

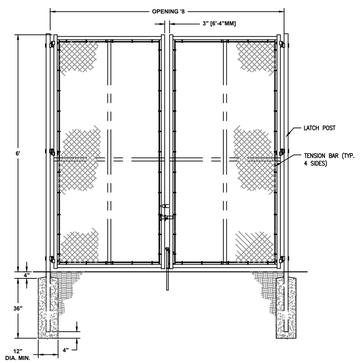
OR, APPROVED EQUAL

DOG PARK DOUBLE ENTRY/EXIT - PLAN VIEW

N.T.S.

QTY: 4

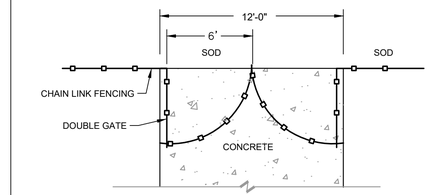
D.1



DOG PARK FENCE - DOUBLE GATE - SECTION

N.T.S.

D.2



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CONTACT: INFO@OSCEOLAFENCESUPPLY.COM
PHONE: (407) 744-0828
WEBSITE: WWW.OSCEOLAFENCESUPPLY.COM

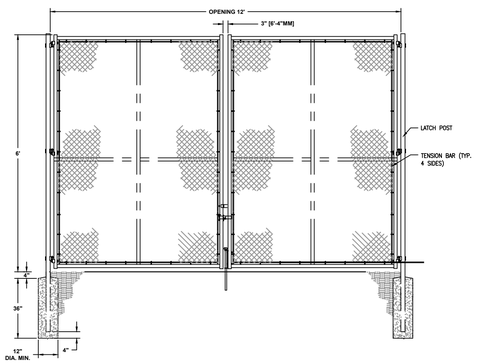
OR, APPROVED EQUAL

DOG PARK MAINTENANCE GATE - PLAN VIEW

N.T.S.

QTY: 2

E.1



DOG PARK MAINTENANCE GATE

N.T.S.

E.2

CLIENT:

HANSON WALTER & ASSOCIATES, INC.

8 BROADWAY #104
KISSIMMEE, FL 34741

PROJECT:

HARVEST GROVE TOWNHOMES

LOCATION:

1820, 1850 & 1860
PUFFIN ROAD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

SEAL:

REVISIONS	DATE
1	05-06-2025
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DESIGNED BY:	RJK
DRAWN BY:	RJK
CHECKED BY:	KAV
DATE:	03-07-2025

PROJECT NUMBER: 5557

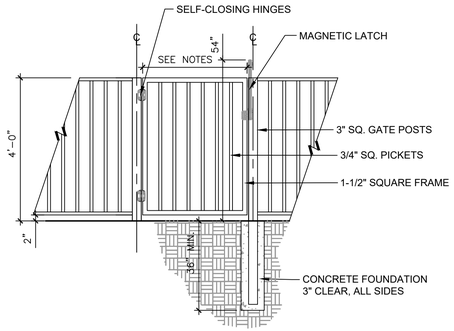
SHEET TITLE:

HARDSCAPE DETAILS

SHEET NUMBER:

HP202

NOTES:
1. POWDERCOAT ALUMINUM FENCE, COLOR- WHITE
2. SEE LIFE SAFETY PLAN FOR GATE SWINGS AND DIMENSIONS
3. FOR GATES WITH PANIC EXIT HARDWARE- GATE PICKET OPENINGS AND FENCE OPENINGS WITHIN 24" OF GATE TO BE IN-FILLED WITH WIRE MESH. SEE LIFE SAFETY PLAN

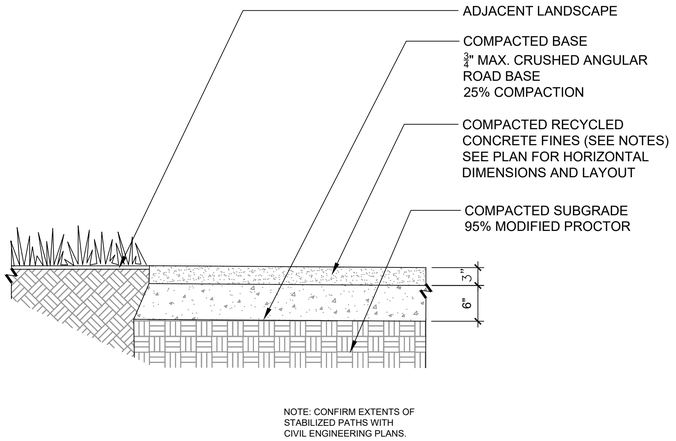


A 48" FENCE WITH GATE AND LATCH
1/2" = 1'-0" P-FA-06

PLAYGROUND FENCE AND GATE A

NOTES:

1. RECYCLED CONCRETE AGGREGATE FOR PATHWAY SURFACE TO BE PRE-BLENDED WITH STABILIZING BINDER (ORGANIC-LOCK OR APPROVED EQUAL). PARTICLE SIZE DISTRIBUTION TO CONFORM TO RECOMMENDATIONS OF BINDER MANUFACTURER.
2. PRE-SOAK THE BASE COURSE PRIOR TO PLACEMENT OF RECYCLED FINES COURSE.
3. PRE-HYDRATE THE STABILIZED PATHWAY MIX AT THE JOB SITE. TURN THE PATHWAY MIX UNTIL 10%-12% MOISTURE LEVEL IS REACHED.
4. COMPACT THE STABILIZED PATHWAY MIX USING A 1-3 TON DOUBLE DRUM OR SINGLE STATIC DRUM ROLLER. DO NOT USE A VIBRATORY PLATE COMPACTOR. WHEN NO VISIBLE ROLLER MARKS CAN BE SEEN ON THE SURFACE, COMPACTION IS COMPLETE.
5. PATHWAY SURFACE TO BE CROWN AT 2% AND SHALL BE FLUSH WITH ADJACENT MATERIALS OR EDGES. THE PATHWAY SHALL BE SLOPES MINIMUM 1% TO DRAIN AWAY FROM ADJACENT STRUCTURES.
6. AFTER THE PATHWAY HAS BEEN COMPACTED AND LEVELED, APPLY A LIGHT SPRAY ON THE SURFACE.
7. STABILIZED PATHWAY SHALL BE ALLOWED TO FULLY CURE BEFORE FOOT TRAFFIC IS ALLOWED.



NOTE: CONFIRM EXTENTS OF STABILIZED PATHS WITH CIVIL ENGINEERING PLANS.

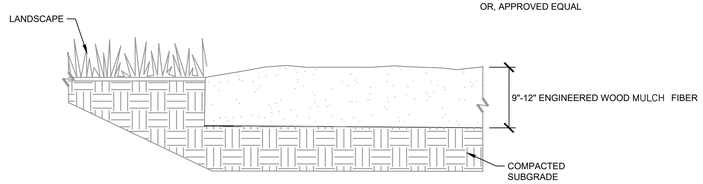
STABILIZED PATH C



PLAYGROUND TURF: ENGINEERED WOOD MULCH FIBER.
INSTALLATION TO MEET MANUFACTURER AND ASTM STANDARDS.

MANUFACTURER: IRVINE WOOD RECOVERY
CONTACT: INFO@IRVINEWOODRECOVERY.COM
PHONE: (513) 831-0060
WEBSITE: WWW.PLAYGROUNDTURF.COM

OR, APPROVED EQUAL



PLAYGROUND SURFACE & EDGE - SECTION B
N.T.S.

CLIENT:

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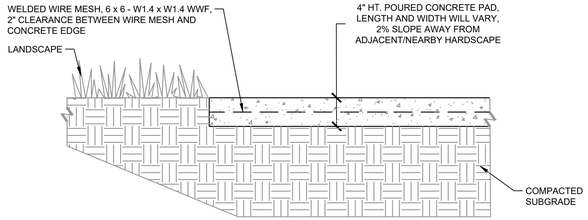
SHEET TITLE:
HARDSCAPE DETAILS

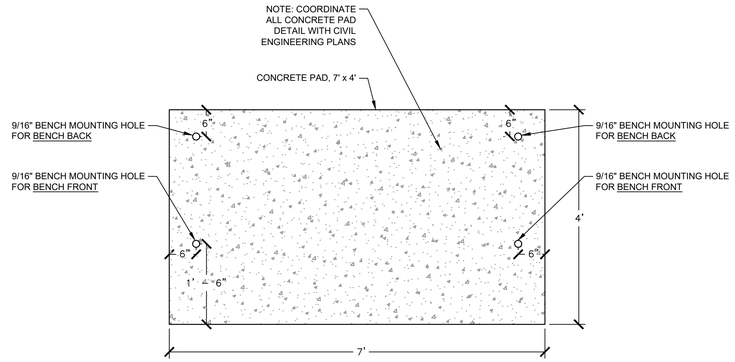
SHEET NUMBER:
HP203



CONCRETE PAD DETAIL - SECTION VIEW

N.T.S.

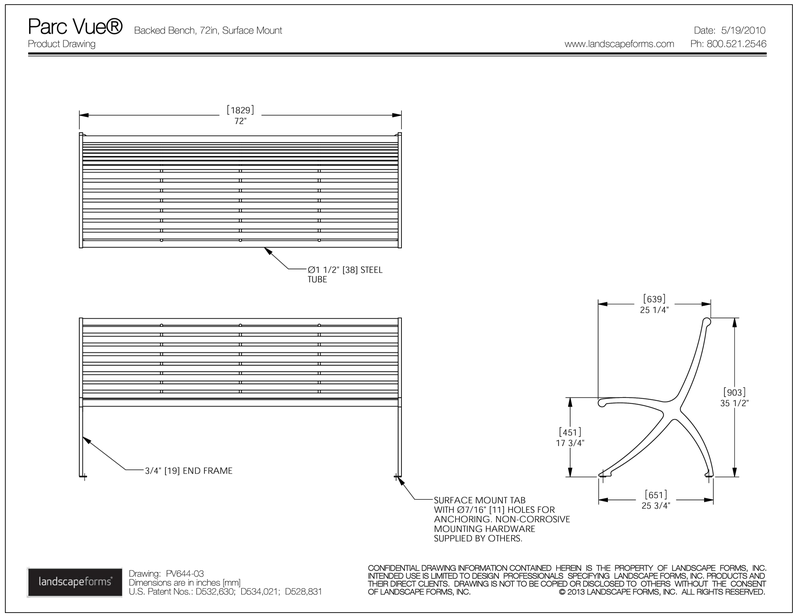
A.1



BENCH ON CONCRETE PAD

N.T.S.

A.2



BENCH ON CONCRETE PAD

N.T.S.

A.3

CLIENT:

HANSON WALTER & ASSOCIATES, INC.

8 BROADWAY #104
KISSIMMEE, FL 34741

PROJECT:

HARVEST GROVE TOWNHOMES

LOCATION:

1820, 1850 & 1860
PUFFIN ROAD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

SEAL:

REVISIONS	DATE
1	05-06-2025
2	06-09-2025

DESIGNED BY:	RJK
DRAWN BY:	RJK
CHECKED BY:	KAV
DATE:	03-07-2025

PROJECT NUMBER: 5557

SHEET TITLE:

HARDSCAPE DETAILS

SHEET NUMBER:

HP204

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thepark AND FACILITIES CATALOG

The Park Catalog
931 Village Blvd Ste 905-354, West
Palm Beach, FL 33409
877-959-8256
noreply@theparkcatalog.com



Small Dog Kit

$4,736.00

Quick Overview

Best Price Guarantee
Bulk Discount
Free Expert Consultation 800-695-3503

Color: Natural- Green and Tan

$4,736.00

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NOTES:
(1) INCLUDES THE FOLLOWING ITEMS: CRAWL TUNNEL, SMALL HOOP JUMP, PAWS TABLE, AND WEAVE POSTS.
(2) INSTALL PER MANUFACTURER'S INSTRUCTIONS.

Need Help? Chat with a representative now.

SMALL DOG PARK EQUIPMENT — A.1
N.T.S. QTY: 1

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The Park Catalog
931 Village Blvd Ste 905-354, West
Palm Beach, FL 33409
877-959-8256
noreply@theparkcatalog.com



Novice Dog Park

$4,614.00

Quick Overview

Best Price Guarantee
Bulk Discount
Free Expert Consultation 800-695-3503

Color: Choose an Option...

$4,614.00

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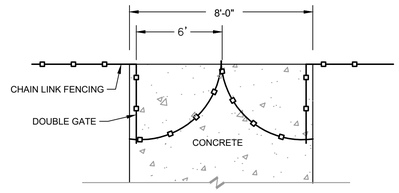
NOTES:
(1) INCLUDES THE FOLLOWING ITEMS: ROVER JUMP OVER, DOGGIE CRAWL, PAWLS TABLE, AND WEAVE POSTS.
(2) INSTALL PER MANUFACTURER'S INSTRUCTIONS.

Need Help? Chat with a representative now.

LARGE DOG PARK EQUIPMENT — A.2
N.T.S. QTY: 1

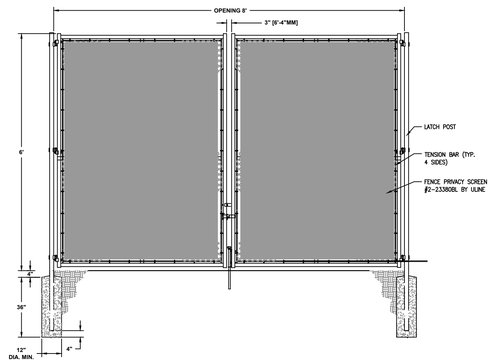


CHAIN LINK FENCING DOUBLE GATE. COLOR: BLACK. INSTALLATION TO MEET MANUFACTURER AND ASTM STANDARDS.

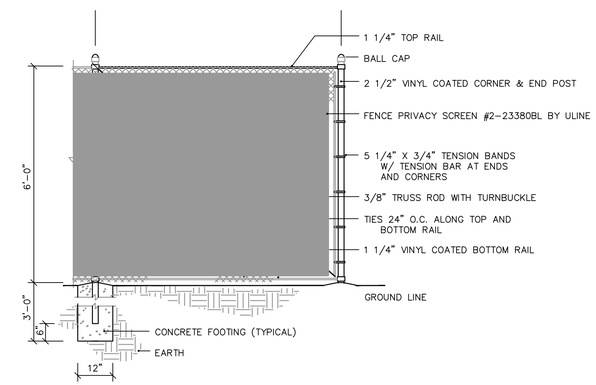
MANUFACTURER: OSCEOLA FENCE SUPPLY, INC.
CONTACT: INFO@OSCEOLAFENCESUPPLY.COM
PHONE: (407) 744-0828
WEBSITE: WWW.OSCEOLAFENCESUPPLY.COM

OR, APPROVED EQUAL

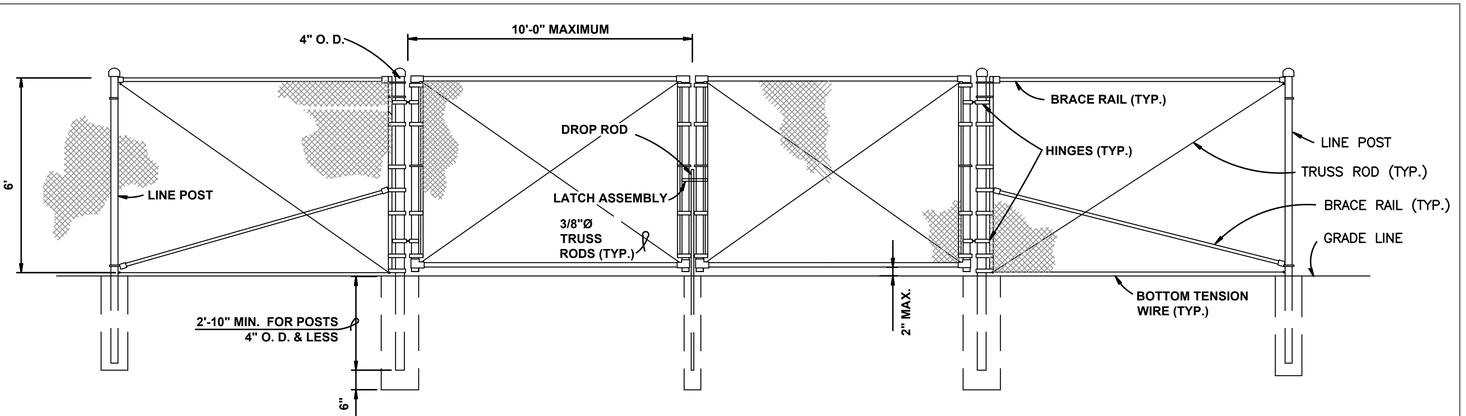
LIFT STATION GATE - PLAN VIEW — C.1
N.T.S. QTY: 1



LIFT STATION GATE — C.2
N.T.S.



LIFT STATION FENCE — B.1
N.T.S.



LIFT STATION FENCE — B.2
N.T.S.

CLIENT:

HANSON WALTER & ASSOCIATES, INC.
8 BROADWAY #104
KISSIMMEE, FL 34741

PROJECT:

HARVEST GROVE TOWNHOMES

LOCATION:
1820, 1850 & 1860
PUFFIN ROAD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

SEAL:

REVISIONS	DATE
1	05-06-2025
2	06-09-2025

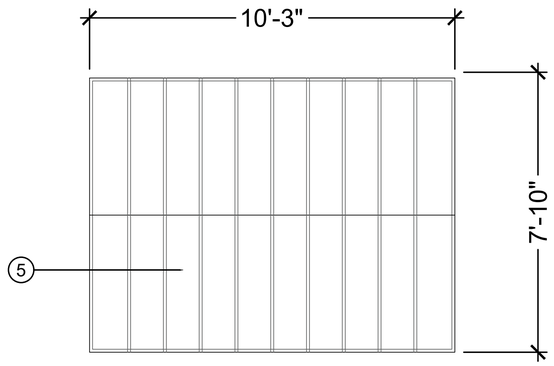
DESIGNED BY:	RJK
DRAWN BY:	RJK
CHECKED BY:	KAV
DATE:	03-07-2025

PROJECT NUMBER: 5557

SHEET TITLE:
HARDSCAPE DETAILS

SHEET NUMBER:
HP205

PLAN VIEW:



LEGEND:

1. 4x4 STEEL TUBING FRAME, WELDED.
2. SURFACE MOUNTED 4C HORIZONTAL MAILBOX WITH 20 DOORS AND 2 PARCEL LOCKERS IN SANDSTONE WITH PRIVATE ACCESS, BY SALISBURY INDUSTRIES. (4 TOTAL UNITS). DARK BRONZE COLOR.
3. POWDER COATED ALUMINUM CABINET FRAME, WELDED. MATCH MAILBOX COLOR
4. CAST-IN-PLACE CONCRETE FOOTING WITH FIELDSTONE VENEER (COLOR TO BE APPROVED BY OWNER). FOOTING SPECIFICATIONS PER STRUCTURAL ENGINEER.
5. POWDER-COATED SEAMED ALUMINUM ROOF. COLOR WHITE.
6. 2" STEEL TUBING WELDED ROOFING SUPPORT STRUCTURE PER STRUCTURAL ENGINEER.

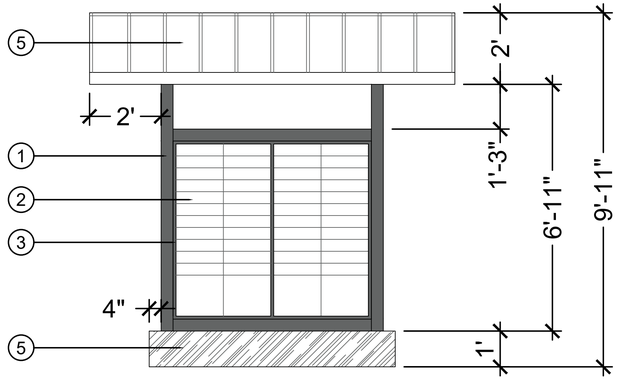
REQUIRES STRUCTURAL APPROVAL

SUBMIT SHOP DRAWINGS FOR APPROVAL

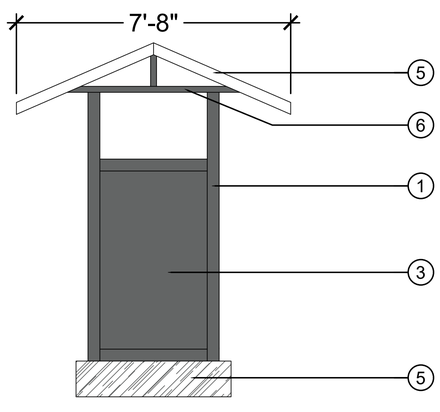
REFERENCE IMAGE



FRONT ELEVATION VIEW:



RIGHT-SIDE ELEVATION VIEW:



MAILBOX KIOSK

SCALE: $\frac{1}{2}$"=1'-0"

QTY: 1

A

CLIENT:

HANSON WALTER & ASSOCIATES, INC.

8 BROADWAY #104
KISSIMMEE, FL 34741

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DATE:	03-07-2025

PROJECT NUMBER: 5557

SHEET TITLE:

HARDSCAPE DETAILS

SHEET NUMBER:

HP206



01 HARVEST GROVE ENTRY SIGN ILLUSTRATION

NTS

P-HA-04

SIGN FABRICATION NOTES
1. LETTERING
¾" ALUMINUM PIN-SET LETTERS
STAND-OFF 1"
FONT AND COLOR- PER OWNER

2. ART WORK
¾" ALUMINUM PIN-SET WATER JET CUT
STAND-OFF 1"
DIGITAL ARTWORK FILE
TO BE PROVIDED TO SIGN
FABRICATOR BY OWNER

FINISH NOTES
1. CONTRACTOR TO PROVIDE
CAST STONE, TILE AND PAINT
SAMPLES FOR APPROVAL BY
OWNER'S REPRESENTATIVE PRIOR
TO PROCURING MATERIALS
OR FABRICATION.

SIGN CODE NOTES
1. SIGN TO BE DOUBLE-SIDED
2. SIGN AREA PER SIGN FACE: 52 SF
3. OVERALL STRUCTURE: 81 SF

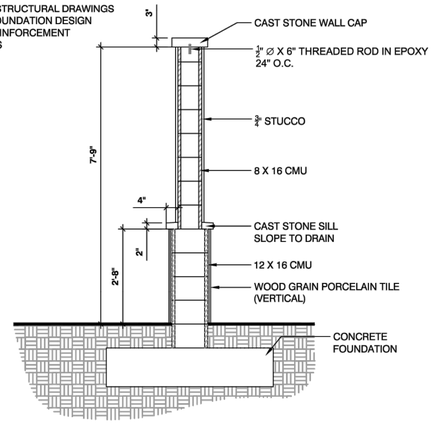


02 HARVEST GROVE ENTRY SIGN ELEVATION

1/2" = 1'-0"

P-HA-06

NOTES:
1. SEE STRUCTURAL DRAWINGS
FOR FOUNDATION DESIGN
AND REINFORCEMENT
DETAILS



03 SIGN SECTION

1/2" = 1'-0"

P-HA-05

CLIENT:

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PROJECT NUMBER: 5557

SHEET TITLE:

HARDSCAPE DETAILS

SHEET NUMBER:

HP207-A

SIGNAGE STRUCTURAL DETAILS TO BE SUBMITTED IN FUTURE

CLIENT:

HANSON WALTER & ASSOCIATES, INC.

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KISSIMMEE, FL 34741

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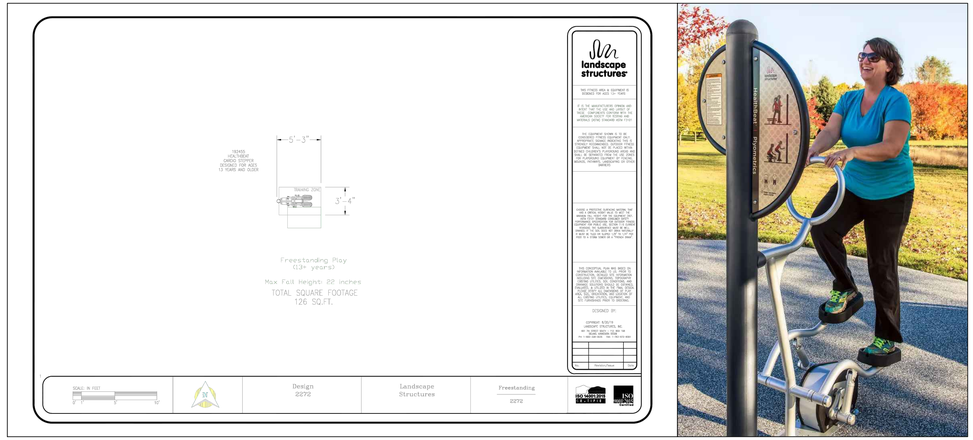
PROJECT NUMBER: 5557

SHEET TITLE:

HARDSCAPE DETAILS

SHEET NUMBER:

HP207-B

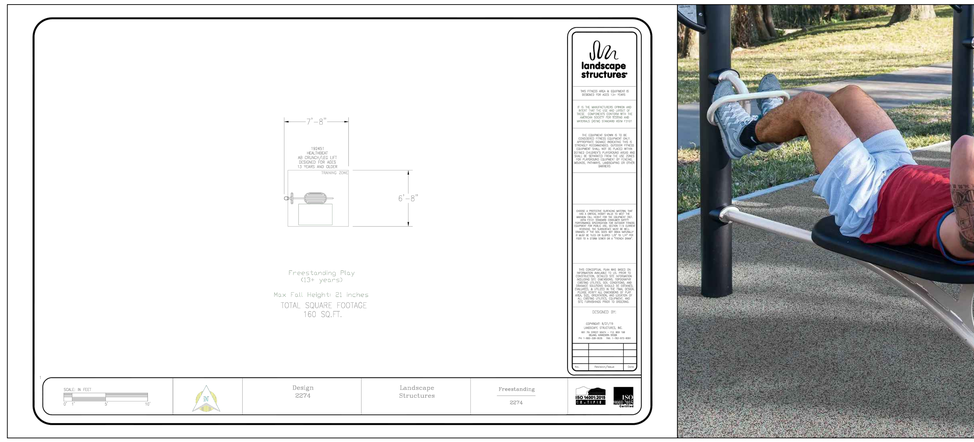


HEALTHBEAT CARDIO STEPPER

N.T.S.

QTY: 2

A

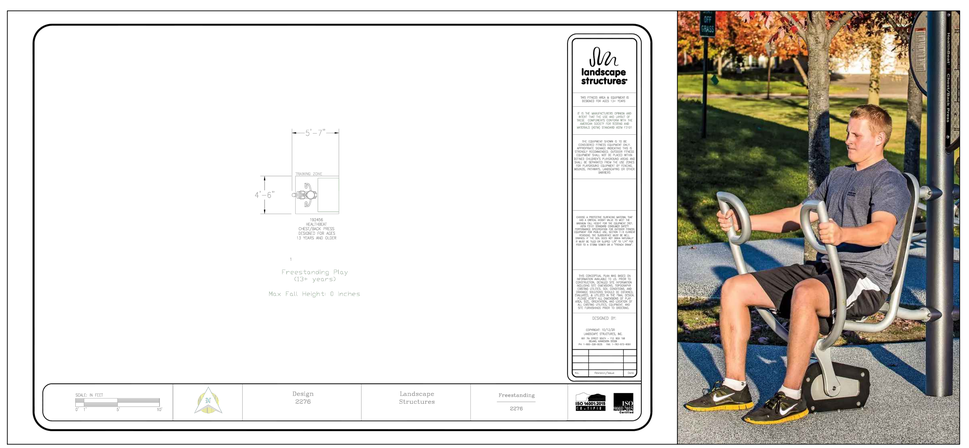


HEALTHBEAT AB CRUNCH/LEG LIFT

N.T.S.

QTY: 1

B



HEALTHBEAT CHEST/BACK PRESS

N.T.S.

QTY: 1

C

CONTACT:
MARY LANGLEY
CUSTOMER SERVICE REPRESENTATIVE
MARY@REPSERVICES.COM
PHONE: 407-947-6318

CLIENT:

HANSON WALTER & ASSOCIATES, INC.

8 BROADWAY #104
KISSIMMEE, FL 34741

PROJECT:

HARVEST GROVE TOWNHOMES

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1820, 1850 & 1860
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ST. CLOUD, FL

CONSULTANT:

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611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

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DRAWN BY:	RJK
CHECKED BY:	KAV
DATE:	03-07-2025

PROJECT NUMBER: 5557

SHEET TITLE:

HARDSCAPE DETAILS

SHEET NUMBER:

HP208

DRAWN BY: KFA

PG-1
PLAY EQUIPMENT PLAN

TOTAL AREA: 5000 SF

FALL HEIGHT: 8'

BORDER: 483 LF CURB

USER CAPACITY: 95

SURFACING: 5000 SF EWF

SUBGRADE ELEV.: -12" BFF

ADA SCHEDULE FBC 240.2.1.2

TOTAL PLAY ACTIVITIES 2-5:

TOTAL PLAY ACTIVITIES 5-12: 17

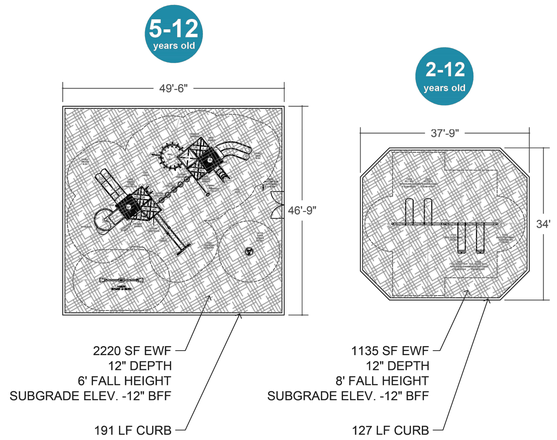
		ACCESSIBLE ELEVATED ACTIVITIES	ACCESSIBLE GROUND-LEVEL ACTIVITIES	ACCESSIBLE GROUND-LEVEL PLAY TYPES
2-5	REQ.	5	3	4
	PROV.	10	5	4
5-12	REQ.	5	3	6
	PROV.	5	7	6

WELCOME SIGN
TO BE LOCATED IN CONSULTATION WITH OWNER

Δ WARNING
INSTALLATION OVER A HARD SURFACE SUCH AS CONCRETE, ASPHALT, OR PACKED EARTH MAY RESULT IN SERIOUS INJURY OR DEATH FROM FALLS.

Δ WARNING
SURFACING AND PLAYSURFACES MAY BECOME **HOT** AND CAUSE BURNS. CHECK FOR HOT SURFACES PRIOR TO PLAYING ON THE PLAYGROUND.

GENERAL NOTES:
1. EQUIPMENT LOCATION TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION
2. ACCESSIBLE ROUTE OF TRAVEL TO THE PLAYGROUND TO BE PROVIDED BY OTHERS, UNLESS OTHERWISE NOTED
3. BASE MUST EXHIBIT POSITIVE DRAINAGE IN ALL AREAS



CONTACT:
MARY LANGLEY
CUSTOMER SERVICE REPRESENTATIVE
MARY@REPSERVICES.COM
PHONE: 407-947-6318

Harvest Grove Townhomes

SAINT CLOUD, FL
PROJECT:21505-1-1 2025.1
NOT FOR CONSTRUCTION

SCALE: 1/16" = 1'
0 8.0 16 32

REP SERVICES, Experts at Play & Outdoor

PLAYGROUND LAYOUT AND EQUIPMENT SPECIFICATIONS
N.T.S.

A



PLAYGROUND ACCESS RAMP
N.T.S.

B

CLIENT:

HANSON WALTER & ASSOCIATES, INC.
8 BROADWAY #104
KISSIMMEE, FL 34741

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DATE:	03-07-2025

PROJECT NUMBER: 5557

SHEET TITLE:
HARDSCAPE DETAILS

SHEET NUMBER:
HP209

PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	SIZE
LARGE TREES							
	BNH	6	BETULA NIGRA `HERITAGE`	HERITAGE RIVER BIRCH	100 GAL. / 3" CAL.	8-10` HT., MULTI-TRUNK	AS SHOWN
	IC	9	ILEX CASSINE	DAHOON HOLLY	65 GAL. / 3" CAL.	11-12` HT. X 4-5 SP.	AS SHOWN
	MV	20	MAGNOLIA VIRGINIANA	SWEET BAY	65 GAL. / 3" CAL.	12-14` HT. X 6` SP.	AS SHOWN
	QVS	106	QUERCUS VIRGINIANA 'SKY CLIMBER'	SKY CLIMBER SOUTHERN LIVE OAK	200 GAL. / 5" CAL.	17'-18' HT. X 7'-8' SP.	AS SHOWN
	TD	8	TAXODIUM DISTICHUM	BALD CYPRESS	65 GAL. / 3" CAL.	10-12` HT. X 5` SP.	AS SHOWN
MEDIUM TREES							
	UA	50	ULMUS ALATA	WINGED ELM	30 GAL. / 2-1/2" CAL.	10-11` HT. X 2-3` SP.	AS SHOWN
	ZCH	84	ZANTHOXYLUM CLAVA-HERCULIS	HERCULES` CLUB	30 GAL. / 2-1/2" CAL.	3-4` HT. X 2-3` SP.	AS SHOWN
SMALL TREES							
	MR	2	MORUS RUBRA	RED MULBERRY	30 GAL. / 2' CAL.	6-8' HT. X 3-4' SP.	AS SHOWN
STREET TREES							
	PP	21	PINUS PALUSTRIS	LONGLEAF PINE	65 GAL. / 3" CAL.	12-14' HT. X 6-8' SP.	AS SHOWN
	QV	43	QUERCUS VIRGINIANA 'SKY CLIMBER'	SKY CLIMBER SOUTHERN LIVE OAK	65 GAL. / 3" CAL.	10-12' HT. X 8-10' SP.	AS SHOWN

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
SHRUBS						
	HPP	58	HAMELIA PATENS VAR. PATENS	FIRE BUSH	3 GAL.	42" HT. X 36" SP.
	IVN	771	ILEX VOMITORIA `NANA`	DWARF YAUPON	3 GAL.	18" HT. X 12" SP.
	VOW	25	VIBURNUM OBOVATUM `DWARF WALTER`S`	DWARF WALTER`S VIBURNUM	3 GAL.	24" HT. X 12" SP.
	VWI	225	VIBURNUM OBOVATUM `WITHLACOOCHE`	WALTER`S VIBURNUM	3 GAL.	24" HT. X 30" SP.
PERENNIALS / GROUNDCOVER						
	COV	116	CARPHEPHORUS ODORATISSIMUS	VANILLALEAF	1 GAL.	
	COL	113	COREOPSIS LEAVENWORTHII	LEAVENWORTH'S TICKSEED	1 GAL.	
	SAS	98	SILPHIUM ASTERISCUS	STARRY ROSINWEED	1 GAL.	
	SOC	136	SOLIDAGO ODORA CHAPMANII	CHAPMAN'S SWEET GOLDENROD	1 GAL.	
	VAI	201	VERNONIA ANGUSTIFOLIA	IRON PLANT	1 GAL.	

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	SPACING
GROUND COVERS							
	PNA	114,845 SF	PASPALUM NOTATUM `ARGENTINE`	BAHIA GRASS	SOLID SOD		
	M	112,828	PINE STRAW MULCH		---		10" o.c.

2

PLANTING SCHEDULE LEGEND:

CAL.	CALIPER
GAL.	GALLON
O.C.	ON CENTER
HT.	HEIGHT
SPR.	SPREAD

NOTES:

(1) PLANT SPACING IS BASED ON THE WIDTH OF PLANTS AT MATURE HEIGHT AND AGE.

(2) QUANTITY OF SOD AND MULCH SHOWN IS FOR ESTIMATION PURPOSES ONLY. ALL FINAL SOD EXTENTS TO BE FIELD VERIFIED AND CONFIRMED WITH CLIENT AND LANDSCAPE ARCHITECT.

Know what's below.
Call before you dig.
Dial 811
Or Call 800-282-7411

CLIENT:

HANSON WALTER & ASSOCIATES, INC.

8 BROADWAY #104
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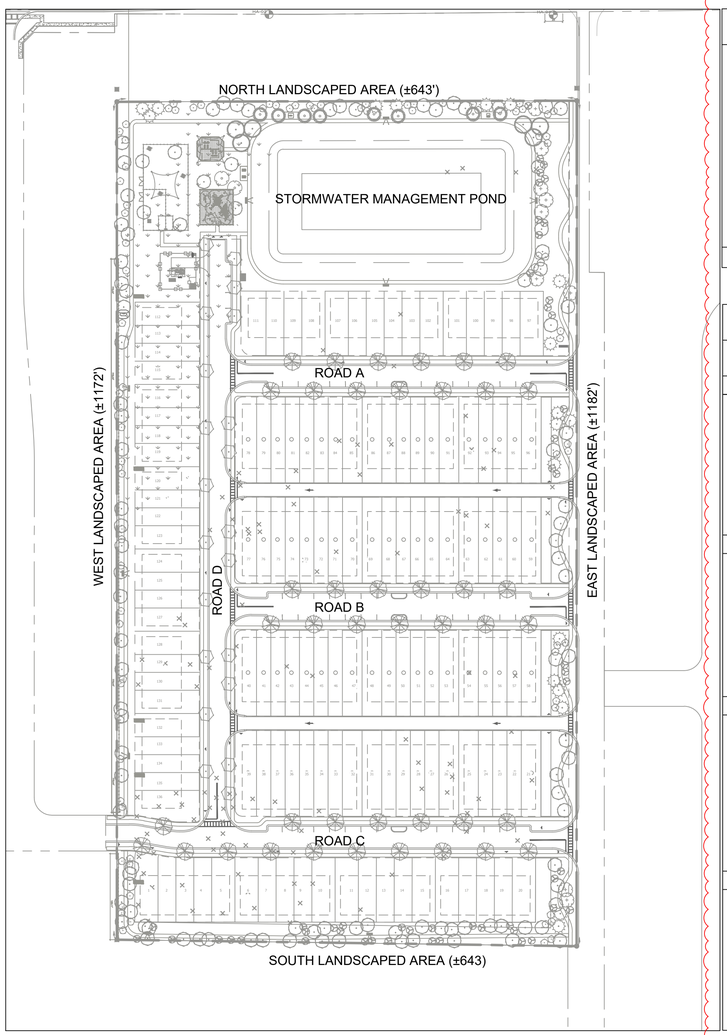
SHEET TITLE:

PLANT SCHEDULE

SHEET NUMBER:

LP001



LANDSCAPE CALCULATIONS & REQUIREMENTS FOR THE CITY OF ST. CLOUD

ZONING & USE

SITE PARCEL ID(s): 052631495000010690
052631495000010760
052631495000010850
052631495000010920

FUTURE LAND USE: INCORPORATED / MEDIUM DENSITY RESIDENTIAL (MDR)

TOTAL SITE AREA: 17.4 ACRES

NOTES:

GENERAL PLANTING REQUIREMENT

MINIMUM CANOPY REQUIREMENT (PER CITY LDC SEC. 4.8.10.)

60 CALIPER INCHES / ACRE
TOTAL SITE AREA = 17.4 ACRES

REQUIRED CALIPER INCHES (60 INCHES x 17.4 ACRES)	= 1,044 CALIPER INCHES REQUIRED
17 EXISTING TREES PROTECTED W/ VARIABLE CAL.	= 306 CAL. INCHES
106 TREES PROVIDED @ 5 INCH CAL. EACH	= 530 CAL. INCHES
107 TREES PROVIDED @ 3 INCH CAL. EACH	= 321 CAL. INCHES
134 TREES PROVIDED @ 2.5 INCH CAL. EACH	= 335 CAL. INCHES
2 TREES PROVIDED @ 2 INCH CAL. EACH	= 4 CAL. INCHES
306+530+321+335+4	= 1,496 TOTAL CAL/DBH INCHES PROVIDED > 1,044 CAL. INCHES REQUIRED

LANDSCAPE BUFFERS

BUFFERING ADJACENT PROPERTIES (PER CITY LDC SEC. 4.8.4.)

NORTH BUFFER (±643') MEDIUM DENSITY RESIDENTIAL (MDR) TO LOW DENSITY RESIDENTIAL (LDR)

NO BUFFER IS REQUIRED.

A 25' WIDE LANDSCAPED AREA IS BEING PROVIDED IN ORDER TO PROVIDE FOR PROJECT ENHANCEMENT.

PROVIDED = 31 LARGE TREES
= 25 MEDIUM TREES
= 195 SHRUBS

WEST BUFFER (±1172') (MEDIUM DENSITY RESIDENTIAL (MDR) TO SINGLE FAM RES (LDR < .5 ACRE))

NO BUFFER IS REQUIRED.

A 25' WIDE LANDSCAPED AREA IS BEING PROVIDED IN ORDER TO PROVIDE FOR PROJECT ENHANCEMENT.

PROVIDED = 31 LARGE TREES
= 35 MEDIUM TREES
= 324 SHRUBS

EAST BUFFER (±1182') (MEDIUM DENSITY RESIDENTIAL (MDR) TO SINGLE FAM RES (LDR < .5 ACRE))

NO BUFFER IS REQUIRED.

A 25' WIDE LANDSCAPED AREA IS BEING PROVIDED IN ORDER TO PROVIDE FOR PROJECT ENHANCEMENT.

PROVIDED = 49 LARGE TREES
= 48 MEDIUM TREES
= 355 SHRUBS
= 664 PERENNIALS

SOUTH BUFFER (±643) (MEDIUM DENSITY RESIDENTIAL (MDR) TO MEDIUM DENSITY RESIDENTIAL (MDR))

NO BUFFER IS REQUIRED.

A 25' WIDE LANDSCAPED AREA IS BEING PROVIDED IN ORDER TO PROVIDE FOR PROJECT ENHANCEMENT.

PROVIDED = 28 LARGE TREES
= 26 MEDIUM TREES
= 193 SHRUBS

TREE DIVERSITY REQUIREMENT

(PER CITY LDC SEC. 4.8.11.)

TREE DIVERSITY REQUIREMENT:
= 4 GENERA OF TREES REQUIRED
= 9 GENERA OF TREES PROPOSED (SEE LP001 FOR GENERA)

= MAXIMUM 50% OF PLANTED TREES SHALL BE ANY ONE GENERA
= 349 TOTAL TREES PROPOSED
= 149 TOTAL LIVE OAKS PROPOSED
= 149 / 349 = 42.6% TOTAL OAKS PROPOSED

LARGE/MEDIUM TREE REQUIREMENT:
= 70% OF TREES SHALL BE LARGE/MEDIUM TREES (2.5" CAL+ AT PLANTING)
= 349 TOTAL TREES PROPOSED
= 347 (2.5"+ CAL) TREES PROPOSED
= 347 / 349 = 99.4% TOTAL LARGE/MEDIUM TREES

SHRUB DIVERSITY REQUIREMENT
= 4 GENERA OF SHRUBS REQUIRED
= 4 GENERA OF SHRUBS PROPOSED

= MAXIMUM 50% OF PLANTED SHRUBS SHALL BE ANY ONE GENERA
= 1,079 TOTAL SHRUBS PROPOSED
= 771 TOTAL DWARF YAUPON PROPOSED
= 791 / 1,105 = 71.4% TOTAL DWARF YAUPON PROPOSED
REQUIREMENT IS NOT MET

STREET TREES (PER CITY LDC SEC. 4.8.5.)

INTERNAL ROADWAY PLANTING (PER ARTICLE VIII, SEC. 8.5.11)

ROAD A 519 LF/ 40 LF	= 13 LARGE TREES REQUIRED = 13 LARGE TREES PROVIDED
ROAD B 517 LF/ 40 LF	= 13 LARGE TREES REQUIRED = 13 LARGE TREES PROVIDED
ROAD C 657 LF/ 40 LF	= 17 LARGE TREES REQUIRED = 17 LARGE TREES PROVIDED
ROAD D 840 LF/ 40 LF	= 21 LARGE TREES REQUIRED = 21 LARGE TREES PROVIDED

NOTES:
ALL STREET TREES TO BE MAINTAINED BY HOMEOWNERS ASSOCIATION PER CITY LAND DEVELOPMENT CODE.

GENERAL LANDSCAPE PLAN NOTES:

1. **NEVER PRUNE OR SHEAR ANY TREES, SHRUBS OR GROUNDCOVERS.**
2. **USE BAHIA SOD, PASPALUM NOTATUM 'ARGENTINE. CONTRACTOR TO VERIFY SOD QUANTITIES.**
3. **CONTRACTOR TO COORDINATE WITH LANDSCAPE ARCHITECT (321) 338-4781. ALL PLANTINGS MUST BE LAID OUT IN FIELD AND APPROVED PRIOR TO PLANTING.**
4. **IF THERE IS A DISCREPANCY BETWEEN PLANTS ON THE PLAN(S) AND PLANTS IN THE PLANT SCHEDULE, THE PLANT SCHEDULE WILL PREVAIL.**
5. **CONTRACTOR IS TO CHECK AND VERIFY ALL LEVELS, DATUMS AND DIMENSIONS ON SITE AND SHALL REPORT ANY DISCREPANCIES OR OMISSIONS TO THIS OFFICE PRIOR TO START OF WORK & DURING THE CONSTRUCTION PHASE.**
6. **THIS DRAWING IS TO BE READ AND UNDERSTOOD IN CONJUNCTION WITH STRUCTURAL, MECHANICAL, ELECTRICAL, CIVIL, ARCHITECTURAL AND / OR ANY OTHER CONSULTANT/S DOCUMENTATION AS MAY BE APPLICABLE TO THE PROJECT PRIOR TO START OF WORK & IT'S DURATION.**
7. **THE DRAWINGS CONTAINED HEREIN ARE THE PROPERTY OF NFC LANDSCAPE ARCHITECTURE. THEY MAY NOT BE COPIED OR REPRODUCED, IN WHOLE OR IN PART, ELECTRONICALLY OR BY ANY OTHER MEANS, WITHOUT WRITTEN PERMISSION. ALL DRAWING SETS MUST BE RETURNED UPON REQUEST.**
8. **MAINTENANCE FOR PERENNIALS: WHEN THE BLOOMS ARE SPENT, LEAVE THE DEAD BLOOMS ON THE PLANTS UNTIL THE SEEDS ARE RIPE (THE SEEDS ARE RIPE WHEN THEY FALL OUT OF THE SEED CAPSULE EASILY WHEN TOUCHED) AND THEN ENSURE THAT THE MULCH IS PULLED BACK FROM THE BASE OF THE PLANT SO THAT THE SEEDS WILL COME INTO CONTACT WITH SOIL WHEN THEY FALL. THIS PROCESS CAN BE AIDED WITH HAND SPREADING OF THE SEEDS. THIS WILL AID THE RE-SEEDING PROCESS FOR THE NEXT SEASON'S NEW PLANT GERMINATION.**
9. **ALL GROUNDCOVER BEDS NEED TO BE WEEDED FOR ONE YEAR OR UNTIL PLANTS FORM A SOLID GROUND COVERING.**

CLIENT:
HANSON WALTER & ASSOCIATES, INC.
8 BROADWAY #104
KISSIMMEE, FL 34741

PROJECT:
HARVEST GROVE TOWNHOMES

LOCATION:
1820, 1850 & 1860
PUFFIN ROAD
ST. CLOUD, FL

CONSULTANT:
NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

SEAL:

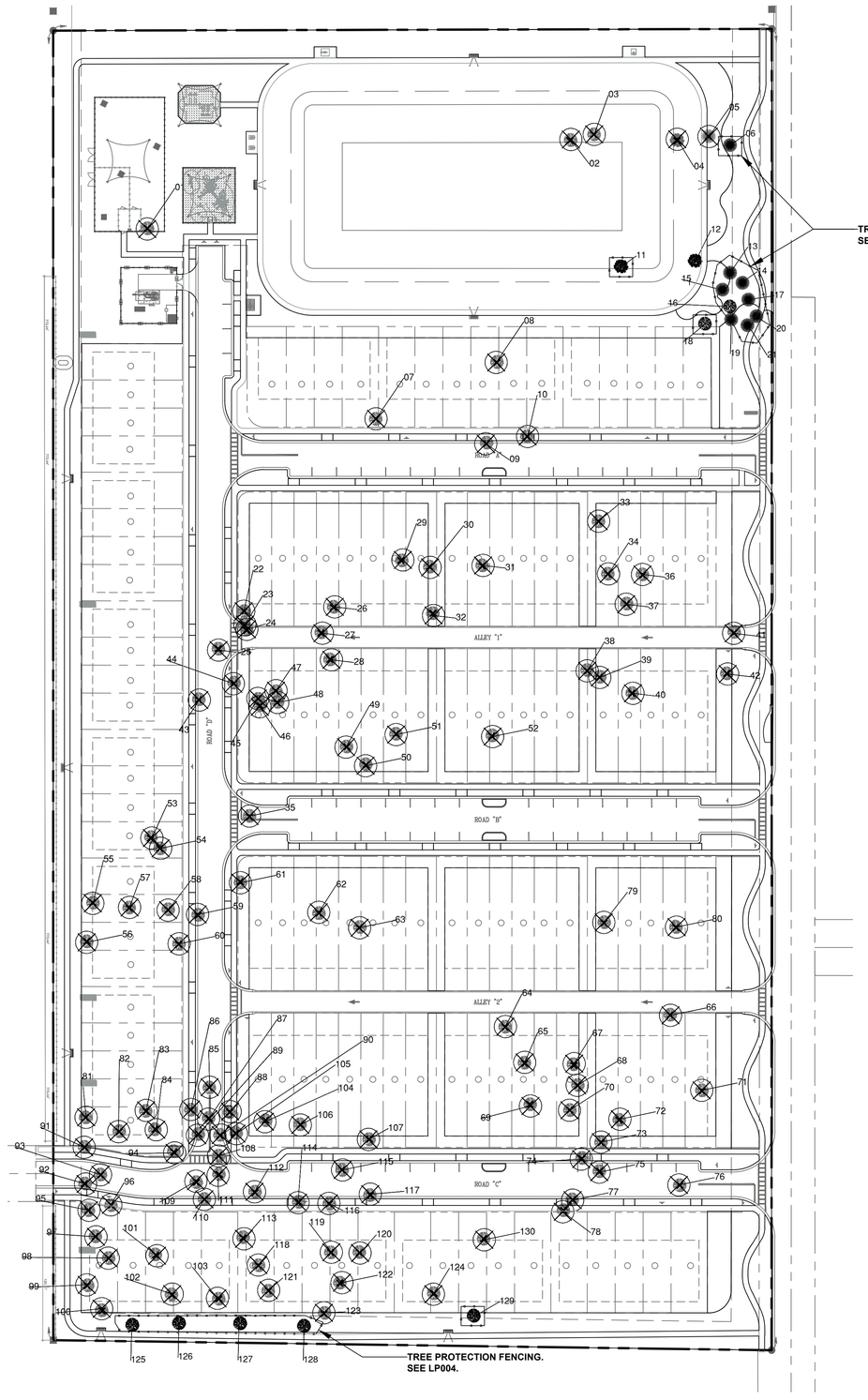
REVISIONS	DATE
1	05-06-2025
2	06-09-2025

DESIGNED BY:	RJK
DRAWN BY:	RJK
CHECKED BY:	KAV
DATE:	03-07-2025

PROJECT NUMBER: 5557

SHEET TITLE:
LANDSCAPE REQUIREMENTS

SHEET NUMBER:
LP002



NO.	SIZE (DBH INCHES)	GENUS	STATUS
1	42	OAK	REMOVE
2	12	OAK	REMOVE
3	30	OAK	REMOVE
4	18	MAPLE	REMOVE
5	8	PINE	REMOVE
6	10	PINE	PROTECT IN PLACE
7	36	OAK	REMOVE
8	15	OAK	REMOVE
9	24	OAK	REMOVE
10	10	OAK	REMOVE
11	24	MAPLE	PROTECT IN PLACE
12	16	MAPLE	PROTECT IN PLACE
13	8	PINE	PROTECT IN PLACE
14	8	PINE	PROTECT IN PLACE
15	8	PINE	PROTECT IN PLACE
16	36	OAK	PROTECT IN PLACE
17	8	PINE	PROTECT IN PLACE
18	8	OAK	PROTECT IN PLACE
19	8	PINE	PROTECT IN PLACE
20	8	PINE	PROTECT IN PLACE
21	8	PINE	PROTECT IN PLACE
22	60	OAK	REMOVE
23	36	OAK	REMOVE
24	18	OAK	REMOVE
25	48	OAK	REMOVE
26	36	OAK	REMOVE
27	48	OAK	REMOVE
28	48	OAK	REMOVE
29	10	OAK	REMOVE
30	20	OAK	REMOVE
31	24	OAK	REMOVE
32	36	OAK	REMOVE
33	12	OAK	REMOVE
34	24	OAK	REMOVE
35	60	OAK	REMOVE
36	36	OAK	REMOVE
37	20	OAK	REMOVE
38	8	OAK	REMOVE
39	20	OAK	REMOVE
40	24	OAK	REMOVE
41	18	OAK	REMOVE
42	20	OAK	REMOVE
43	18	OAK	REMOVE
44	36	OAK	REMOVE
45	36	OAK	REMOVE
46	24	OAK	REMOVE
47	60	OAK	REMOVE
48	24	OAK	REMOVE
49	22	OAK	REMOVE
50	28	OAK	REMOVE
51	16	OAK	REMOVE
52	24	OAK	REMOVE
53	12	OAK	REMOVE
54	24	OAK	REMOVE
55	18	OAK	REMOVE
56	28	OAK	REMOVE
57	30	OAK	REMOVE
58	36	OAK	REMOVE
59	28	OAK	REMOVE
60	8	OAK	REMOVE
61	32	OAK	REMOVE
62	28	OAK	REMOVE
63	28	OAK	REMOVE
64	60	OAK	REMOVE
65	40	OAK	REMOVE

NO.	SIZE (DBH INCHES)	GENUS	STATUS
66	28	OAK	REMOVE
67	18	OAK	REMOVE
68	18	OAK	REMOVE
69	40	OAK	REMOVE
70	24	OAK	REMOVE
71	48	OAK	REMOVE
72	24	OAK	REMOVE
73	24	OAK	REMOVE
74	18	OAK	REMOVE
75	36	OAK	REMOVE
76	24	OAK	REMOVE
77	32	OAK	REMOVE
78	12	OAK	REMOVE
79	38	OAK	REMOVE
80	30	OAK	REMOVE
81	24	OAK	REMOVE
82	60	OAK	REMOVE
83	36	OAK	REMOVE
84	24	OAK	REMOVE
85	24	OAK	REMOVE
86	24	OAK	REMOVE
87	18	OAK	REMOVE
88	40	OAK	REMOVE
89	32	OAK	REMOVE
90	18	OAK	REMOVE
91	15	OAK	REMOVE
92	10	OAK	REMOVE
93	15	OAK	REMOVE
94	24	OAK	REMOVE
95	10	OAK	REMOVE
96	18	OAK	REMOVE
97	18	OAK	REMOVE
98	18	OAK	REMOVE
99	48	OAK	REMOVE
100	18	OAK	REMOVE
101	24	OAK	REMOVE
102	24	OAK	REMOVE
103	24	OAK	REMOVE
104	8	OAK	REMOVE
105	8	OAK	REMOVE
106	18	OAK	REMOVE
107	15	OAK	REMOVE
108	18	OAK	REMOVE
109	22	OAK	REMOVE
110	24	OAK	REMOVE
111	18	OAK	REMOVE
112	8	OAK	REMOVE
113	36	OAK	REMOVE
114	36	OAK	REMOVE
115	30	OAK	REMOVE
116	42	OAK	REMOVE
117	24	OAK	REMOVE
118	18	OAK	REMOVE
119	8	OAK	REMOVE
120	24	OAK	REMOVE
121	36	OAK	REMOVE
122	48	OAK	REMOVE
123	36	OAK	REMOVE
124	18	OAK	REMOVE
125	36	OAK	PROTECT IN PLACE
126	18	OAK	PROTECT IN PLACE
127	36	OAK	PROTECT IN PLACE
128	48	OAK	PROTECT IN PLACE
129	18	OAK	PROTECT IN PLACE
130	18	OAK	REMOVE
TOTAL INCHES TO BE REMOVED:			2974
TOTAL INCHES TO PROTECT IN PLACE:			306

LEGEND:

35 EXISTING TREE TO BE REMOVED

128 EXISTING TREE TO REMAIN AND BE PROTECTED

TREE PROTECTION FENCE

Know what's below. Call before you dig. Dial 811 Or Call 800-282-7411

60 0 30 60 120

SCALE: 1" = 60'

NORTH

CLIENT:

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DESIGNED BY:	RJK
DRAWN BY:	RJK
CHECKED BY:	KAV
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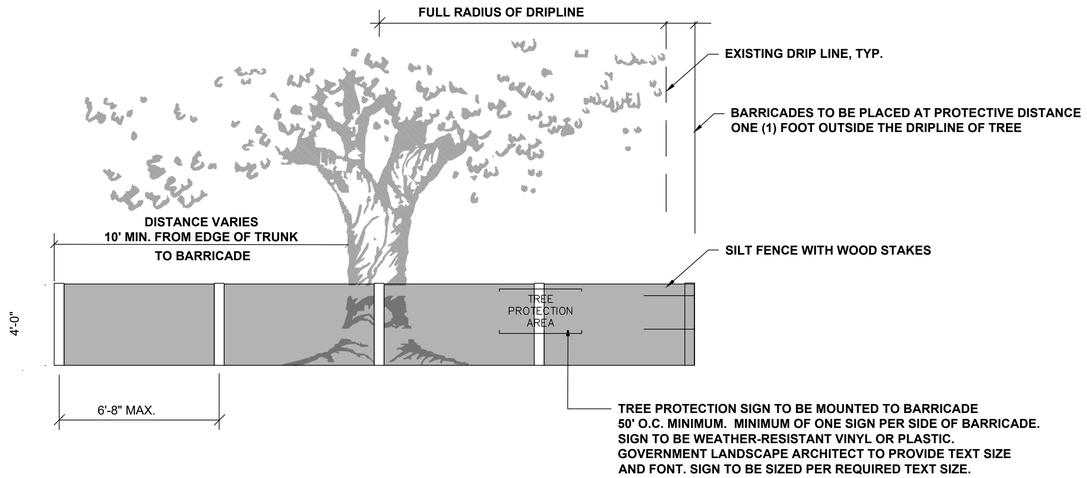
PROJECT NUMBER: 5557

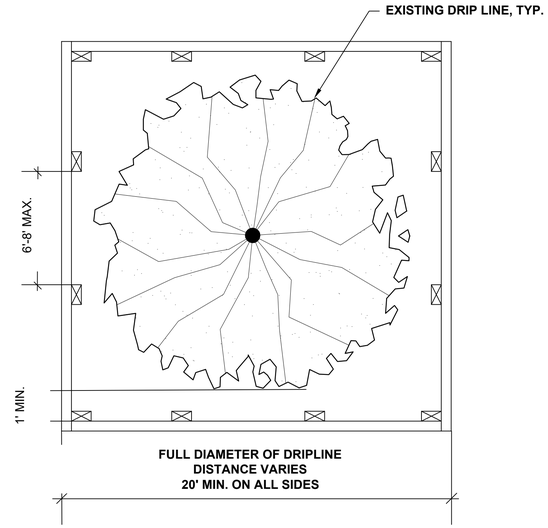
SHEET TITLE:

TREE MITIGATION PLAN

SHEET NUMBER:

LP003





TREE PROTECTION BARRICADE

A

TREE PROTECTION AND PRESERVATION NOTES:

1. INSTALL PROTECTIVE BARRICADES TO PREVENT DEMOLITION OF OR DAMAGE TO EXISTING TREES AND VEGETATION TO REMAIN THAT ARE LOCATED WITHIN 50 FEET OF ANY CONSTRUCTION ACTIVITY, STORAGE, EQUIPMENT, OR MATERIALS.

2. PROTECTIVE BARRICADES WILL BE PLAINLY VISIBLE AND WILL CREATE A CONTINUOUS BOUNDARY AROUND TREES, CLUSTERS OF TREES, AND VEGETATION TO REMAIN. BARRIERS WILL BE PLACED 1-FOOT OUTSIDE OF THE DRIPLINE OF EXISTING TREES TO REMAIN WHEREVER POSSIBLE. WHERE DEMOLITION OR CONSTRUCTION ACTIVITIES ARE PROPOSED WITHIN THIS AREA, BARRIERS MAY BE PLACED AS CLOSE AS 10-FEET MINIMUM FROM THE OUTSIDE OF THE TREE TRUNK. IF NECESSARY, CLOSER PLACEMENT MAY BE POSSIBLE WITH PRIOR REVIEW AND APPROVAL OF THE LANDSCAPE ARCHITECT.

3. PROTECTIVE BARRIERS WILL BE 4-FEET HIGH AND CONSIST OF (2) 2X4 HORIZONTAL WOOD MEMBERS EQUALLY SPACED TO SUPPORT SILT FENCING MATERIAL. PLACE A 6-INCH DEPTH OF MULCH WITHIN BARRIER AREAS WHERE EXISTING VEGETATIVE OR MULCH COVER DOES NOT EXIST.

4. MACHINERY, VEHICLES, AND STORAGE OF MATERIALS WILL NOT BE PERMITTED WITHIN BARRICADES. UNDER NO CIRCUMSTANCES WILL STORAGE OF CHEMICALS AND MATERIALS POTENTIALLY HARMFUL TO TREES OR VEGETATION TO REMAIN BE PLACED WITHIN BARRIER AREAS.

5. PROTECT EXISTING TREES AND VEGETATION TO REMAIN FROM LANDSCAPE DEMOLITION OR CLEARING ACTIVATES THAT MAY UTILIZE HERBICIDES OR PESTICIDES THAT ARE HAZARDOUS TO EXISTING TREE AND SHRUB SPECIES.

6. NO GRADE CHANGES MAY OCCUR WITHIN THE TREE BARRIER AREA.

7. NO WIRES, GRADE STAKES, LIGHTING, EQUIPMENT, OR OTHER CONSTRUCTION ITEMS WILL BE ATTACHED TO TREES OR VEGETATION TO REMAIN.

8. IF EXISTING TREES AND VEGETATION TO REMAIN ARE IRRIGATED, CONTINUE IRRIGATION OR WATERING ACTIVITIES THROUGHOUT THE DURATION OF CONSTRUCTION AND UNTIL FINAL ACCEPTANCE.

9. PROTECTIVE BARRICADES WILL BE INSTALLED PRIOR TO ANY DEMOLITION OR CONSTRUCTION ACTIVITIES. BARRIERS TO REMAIN IN PLACE UNTIL LANDSCAPING OPERATIONS BEGIN. ONCE REMOVED, MINIMIZE CONSTRUCTION ACTIVITIES, STORAGE, AND VEHICLE AND EQUIPMENT TRAFFIC IN THE AREA AS MUCH AS POSSIBLE.

10. IF DEMOLITION ACTIVITIES REQUIRE HARDSCAPE OR BUILDING DEMOLITION WITHIN THE DRIPLINE OR WITHIN 25-FEET OF THE TRUNK OF AN EXISTING TREE TO REMAIN, SUBMIT A DETAILED SUMMARY OF PROPOSED DEMOLITION ACTIVITIES TO THE LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF SUCH ACTIVITIES. THE USE OF HEAVY EQUIPMENT AND VEHICLES IS PROHIBITED IN THE 25' AREA, AND THE CONTRACTOR TO UTILIZE HAND TOOLS AND MANUAL REMOVAL WITHIN THESE AREAS. UPON REVIEW OF SPECIFIC CONDITIONS, THE LANDSCAPE ARCHITECT MAY ALLOW USE OF SPECIFIC EQUIPMENT. TRAFFIC AND ACTIVITY ROUTES FOR REMOVAL OF HARDSCAPE AND BUILDING COMPONENTS WITHIN THE DRIPLINE WILL BE DIRECTED AWAY FROM THE TREE AND DRIPLINE AREAS AS MUCH AS POSSIBLE TO MINIMIZE IMPACTS WITHIN DRIPLINE AREAS.

11. DEMOLITION OF UNDERGROUND UTILITIES SHALL MINIMIZE IMPACTS ON EXISTING TREES. SUBMIT DETAILED SUMMARY OF PROPOSED ACTIVITIES TO THE LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF ACTIVITIES. TERMINATE UTILITY DEMOLITION PRIOR TO IMPACTING EXISTING TREE ROOTS IF POSSIBLE AND CAP AND ABANDON UTILITY LINES IN PLACE.

12. IF TREE OR ROOT PRUNING IS REQUIRED FOR EXISTING TREES, THESE ACTIVITIES WILL BE PERFORMED UNDER THE DIRECT SUPERVISION OF AN ISA-CERTIFIED ARBORIST BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA). TREE PRUNING WILL BE DONE IN ACCORDANCE WITH THE MOST CURRENT VERSION OF THE AMERICAN NATIONAL STANDARD FOR TREE CARE OPERATIONS, 'TREE, SHRUB, AND OTHER WOODY PLANT MAINTENANCE', ANSI A300 AND 'PRUNING, TRIMMING, REPAIRING, MAINTAINING, AND REMOVING TREES AND CUTTING BRUSH - SAFETY REQUIREMENTS' (ANSI Z133). NO MORE THAN 25% OF THE CANOPY SHOULD BE REMOVED FOR MATURE TREES. ON YOUNGER OR SMALLER TREES, LIMB REMOVAL WILL RESULT IN NO MORE THAN 33% OF THE TRUNK BEING BARE OF BRANCHES IN THE CROWN AREA. KEEP ROOTS THAT ARE EXPOSED OR HAVE BEEN TRIMMED BY COVERING WITH SOIL, CLOTH, OR OTHER ACCEPTABLE MATERIAL AND KEEP ROOTS MOIST. ANY ROOTS 1-INCH OR LARGER IN DIAMETER WILL BE EXPOSED BY HAND DIGGING AND HAND CUT OR SAWN CLEANLY. PROVIDE SUPPLEMENTAL IRRIGATION TO THOSE TREES THAT HAVE UNDERGONE ROOT PRUNING. ENSURE IRRIGATION IS PROVIDED FOR A DURATION AND OF A VOLUME SUCH THAT IT REACHES THE TREE'S ROOT ZONE. **ROOT PRUNING SHOULD BE COMPLETED SIX MONTHS TO TWELVE MONTHS IN ADVANCE OF CONSTRUCTION ACTIVITY. BEGIN ROOT PRUNING AS SOON AS PLANS ARE RECEIVED- DO NOT POSTPONE UNTIL CONSTRUCTION ACTIVITIES HAVE BEGUN.**

13. CONDUCT A PRE-DEMOLITION CONFERENCE INCLUDING THE PROJECT LANDSCAPE ARCHITECT TO DISCUSS PROPOSED TREE PROTECTION BARRIER DETAILS AND LAYOUT, TREE OR ROOT PRUNING, AND OTHER ACTIVITIES AS LISTED ABOVE PRIOR TO DEMOLITION ACTIVITIES. PROVIDE TWO-WEEKS' NOTICE OF CONFERENCE TO INVITED PARTIES.

14. ALL EXISTING TREES TO REMAIN TO RECEIVE MYCORRHIZAE INOCULATION.

CLIENT:

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SEAL:

REVISIONS	DATE
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2	06-09-2025

DESIGNED BY:	RJK
DRAWN BY:	RJK
CHECKED BY:	KAV
DATE:	03-07-2025

PROJECT NUMBER: 5557

SHEET TITLE:

TREE PROTECTION BARRICADE

SHEET NUMBER:

LP004

LANDSCAPE INSTALLATION NOTES:

1. **SITE CONDITIONS** CONTRACTOR SHALL FAMILIARIZE HIMSELF/HERSELF WITH EXISTING SITE CONDITIONS PRIOR TO BIDDING AND INITIATING PLANTING. ALL EXISTING SITE FURNISHINGS, PAVING, LANDSCAPE, TREES AND OTHER ELEMENTS TO REMAIN SHALL BE PROTECTED FROM ANY DAMAGE. ALL INSTALLATION OF PLANT MATERIAL SHALL COMPLY WITH APPLICABLE JURISDICTIONAL CODES. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS ASSOCIATED WITH THIS WORK. CONTRACTOR TO REPAIR ALL DAMAGE DONE TO PROPERTY DURING DEMOLITION, RELOCATION AND/OR INSTALLATION ACTIVITIES AS THEIR SOLE EXPENSE.

2. **FIELD CONDITIONS** THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND LOCATION OF PROPOSED IMPROVEMENTS PRIOR TO INITIATING ANY CONSTRUCTION. REPORT ANY DISCREPANCIES OR CONFLICTS BETWEEN THE CONSTRUCTION DRAWINGS AND FIELD CONDITIONS TO THE LANDSCAPE ARCHITECT IMMEDIATELY. SEE CIVIL ENGINEERING DRAWINGS FOR GENERAL GRADING OF THE SITE, INCLUDING FINISH GRADES FOR PARKING LOTS, ROADWAYS, SIDEWALKS AND PLANTING AREAS. ALL GRADES, DIMENSIONS AND EXISTING CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR ON-SITE BEFORE CONSTRUCTION AND/OR FABRICATION BEGINS. ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DRAWINGS AND THE FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. MAINTAIN A MINIMUM OF 5 FEET HORIZONTAL SEPARATION BETWEEN ALL TREE AND SHRUB ROOT BALLS FROM ALL TWA MAINTAINED UTILITIES.

3. **UNIT PRICING** THE CONTRACTOR SHALL PROVIDE UNIT PRICES AND INCLUDE THE TOTAL COST OF THE WORK TO INSTALL THE PROJECT INCLUDING BUT NOT LIMITED TO EQUIPMENT, MATERIAL, PRODUCTS, GUARANTEES, LABOR, INSTALLATION, PLANTING SOIL MIX, MULCH, AND SO FORTH TO PROVIDE A COMPLETE JOB AS OUTLINED ON THE DRAWINGS. THE OWNER SHALL HAVE THE OPTION TO ADD OR DEDUCT FROM THE LUMP SUM BID CONTRACT AMOUNT, BASED ON THE QUOTED UNIT PRICES FOR ANY OF THE ITEMS LISTED IN THE "PLANT LIST". IN THE EVENT OF VARIATION BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND THE PLANS, THE PLANS SHALL CONTROL. THE CONTRACTOR SHALL VERIFY ALL QUANTITIES AND REPORT ANY DISCREPANCIES AT THE TIME OF BIDDING. PROVIDE PRODUCT SUBMITTALS TO LANDSCAPE ARCHITECT. IF THERE IS A DISCREPANCY BETWEEN PLANTS ON PLAN(S) AND PLANTS IN THE PLANT SCHEDULE, THE PLANT SCHEDULE SHOULD PREVAIL.

4. **COORDINATION WITH OTHER TRADES** THE WORK SHALL BE COORDINATED WITH OTHER TRADES, INCLUDING IRRIGATION AND ELECTRICAL TO PREVENT CONFLICTS. CARE SHALL BE TAKEN TO AVOID BURIED AND OVERHEAD UTILITIES. CONTRACTOR RESPONSIBLE FOR KNOWING ALL UTILITY LOCATIONS.

5. **UTILITY LOCATIONS** THE CONTRACTOR SHALL REVIEW ARCHITECTURE/ENGINEERING PLANS TO BECOME THOROUGHLY FAMILIAR WITH SURFACE AND SUBSURFACE UTILITIES. LOCATION OF ALL UTILITIES AND BASE INFORMATION IS APPROXIMATE. CONTRACTOR SHALL NOTIFY ALL NECESSARY UTILITY COMPANIES 48 HOURS MINIMUM PRIOR TO DIGGING FOR VERIFICATION OF ALL UNDERGROUND UTILITIES, IRRIGATION AND ALL OTHER OBSTRUCTIONS AND COORDINATE WITH OWNER'S REPRESENTATIVE PRIOR TO INITIATING INSTALLATION. CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR OR REPLACE ANY DAMAGE COMMITTED TO EXISTING ELEMENTS OR UTILITIES ABOVE OR BELOW GROUND TO ITS ORIGINAL CONDITION AND TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.

CONTRACTOR SHALL FIELD ADJUST LOCATION OF PLANT MATERIAL AS NECESSARY TO AVOID DAMAGE TO EXISTING UNDERGROUND UTILITIES AND/OR EXISTING ABOVE GROUND ELEMENTS. ALL CHANGES REQUIRED SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE AND SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE.

MAINTAIN A MINIMUM OF 5 FEET HORIZONTAL SEPARATION BETWEEN ALL TREE AND SHRUB ROOTS AND ALL TWA MAINTAINED UTILITIES.

6. **ROUGH GRADING** THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ROUGH GRADING THE SITE TO WITHIN +/- 0.10 FT. OF GRADES SHOWN ON GRADING PLANS. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR FINISH GRADES IN ALL LANDSCAPE AREAS. CONTRACTOR TO APPROVE ALL GRADED AREAS PRIOR TO PLANTING.

7. **DRAINAGE PERCOLATION TESTING** CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE TO DRAINAGE AS INDICATED ON THE GRADING DRAWINGS. CONTRACTOR SHALL INSURE VERTICAL DRAINAGE AND PERCOLATION OF ALL PLANTING AREAS PRIOR TO INSTALLATION. PERFORM PERCOLATION TESTS IN SEPARATE AREAS OF THE PROJECT SITE. WATER MUST BE ABLE TO PENETRATE AND MOVE THROUGH SOIL; ONE INCH PER HOUR IS CONSIDERED OPTIMAL. IF WATER REMAINS FOR MORE THAN 24 HOURS, IMMEDIATELY NOTIFY THE LANDSCAPE ARCHITECT. PERCOLATION TEST RESULTS SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT. VERTICAL DRILLING THROUGH ANY COMPACTED FILL TO NATIVE SOIL SHALL BE ACCOMPLISHED TO AID DRAINAGE IF NECESSARY. IF INADEQUATE VERTICAL DRAINAGE IS ENCOUNTERED, THE CONTRACTOR SHALL SUBMIT RECOMMENDATIONS FOR PROVIDING ADEQUATE DRAINAGE TO THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT.

8. **SOIL TESTING** THE CONTRACTOR SHALL BEAR ALL COSTS OF SOIL TESTING AND REQUIRED SOIL AMENDMENTS ASSOCIATED WITH THE WORK PRIOR TO COMMENCEMENT OF LANDSCAPE INSTALLATION. THE CONTRACTOR SHALL PROVIDE COMPLETE SOIL TESTS FOR AT LEAST THREE SEPARATE AREAS UNDISTURBED BY PREVIOUS WORK AND TWO AREAS DISTURBED AND/OR REFILLED. CONTACT LANDSCAPE ARCHITECT FOR SOIL TESTING LOCATIONS. CONTRACTOR SHALL ALERT LANDSCAPE ARCHITECT IF ANY UNUSUAL SOILS ARE DISCOVERED ON SITE. IF PH ADJUSTERS ARE NEEDED THE PREFERRED SUBSTANCES FOR ALTERATION ARE: LIME-COMMERCIAL GRADE GROUND OR HYDRATED LIMESTONE CONTAINING NOT LESS THAN 50% OF TOTAL OXIDES; ALUMINUM SULFATE - COMMERCIAL GRADE.

IMPORTED TOPSOIL: THE MANUFACTURERS ANALYSIS AND/OR PRODUCT LITERATURE SHALL BE SUBMITTED TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.

EXISTING TOPSOIL: FOLLOW TESTING PROCEDURES OUTLINES ABOVE TO ENSURE pH REQUIREMENTS, ORGANIC CONTENT AND PRESENCE OF OBJECTIONABLE MATERIAL ARE ALL NOTED.

9. **SOIL PREPARATION** ALL SOILS TO BE TILLED TO A DEPTH OF 12 INCHES MINIMUM. REMOVE STONES MEASURING OVER 1 ½ INCHES IN ANY DIMENSION. REMOVE STICKS, RUBBISH, LIMEROCK AND OTHER EXTRANEOUS MATTER. THE CONTRACTOR SHALL PROVIDE AN APPROVED PLANTING SOIL MIXTURE FOR ALL PLANT MATERIAL. SEE LANDSCAPE INSTALLATION DETAILS FOR SOIL MIXTURE RECIPE.

TOPSOIL SHALL BE NATURAL, FRIABLE, FERTILE, FINE LOAMY SOIL POSSESSING CHARACTERISTICS OF REPRESENTATIVE TOPSOIL IN THE VICINITY THAT PRODUCES HEAVY GROWTH. TOPSOIL SHALL HAVE A ph RANGE OF 5.5 TO 7.4, FREE FROM SUBSOIL, OBJECTIONABLE WEEDS, LITTER, STIFF CLAY, STONES LARGER THAN ONE INCH DIAMETER, STUMPS, ROOTS, TRASH, TOXIC SUBSTANCES OR ANY OTHER DELETERIOUS MATERIAL WHICH MAY BE HARMFUL TO PLANT GROWTH OR HINDER PLANTING OPERATIONS. TOPSOIL SHALL CONTAIN A MINIMUM OF THREE PERCENT ORGANIC MATERIAL.

10. **PARKING AREA EXCAVATION** PARKING AREA LANDSCAPE ISLANDS SHALL BE EXCAVATED OF ALL ROADWAY BASE MATERIAL (MINIMUM DEPTH OF 24 INCHES) AND BACK FILLED WITH APPROVED PLANTING SOIL MIX. SUPER LOAM PLANTING MIX (80% TOPSOIL PLANTING MIX, 20% COMPOST).

11. **BIOCHAR** AND **BIOSOLIDS** ARE BENEFICIAL SOIL ADDITIVES THAT HELP PROMOTE PLANT GROWTH AND ARE RECOMMENDED FOR USE IN THE LANDSCAPE BEDS AT THE TIME OF PLANT INSTALLATION.

A. ORDER ONLINE: WWW.BIOCHARNOW.COM
B. APPLICATION: USE 'SAND SIZE' AT A RATE OF 1 CUBIC FOOT PER 20 SQUARE FEET OF PLANTING AREA.

12. **NO PLANT SUBSITUTIONS ALLOWED** NO PLANT SUBSTITUTIONS WILL BE ACCEPTED WITHOUT WRITTEN APPROVAL BY THE LANDSCAPE ARCHITECT. CONTRACTOR SHALL SUBMIT TO THE LANDSCAPE ARCHITECT PROOF OF NON-AVAILABILITY AND A PROPOSAL FOR EQUIVALENT MATERIAL.

13. **PLANTING**

A. THE PLANT QUANTITIES SHOWN ON THE LANDSCAPE PLANS ARE FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES AND REPORTING ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT FOR CLARIFICATION PRIOR TO CONTRACT AWARD AND COMMENCEMENT OF WORK.

B. PRIOR TO PLANTING INSTALLATION, THE CONTRACTOR SHALL CONFIRM THE AVAILABILITY OF ALL THE SPECIFIED PLANT MATERIALS AND MAKE ARRANGEMENTS WITH THE LANDSCAPE ARCHITECT TO REVIEW PLANT MATERIAL.

C. THE CONTRACTOR IS RESPONSIBLE FOR ERADICATING WEEDS AND GRASS WITHIN THE LIMITS OF THE PLANTING AREAS PRIOR TO BEGINNING LANDSCAPE INSTALLATION. PERENNIAL WEEDS AND GRASSES TO BE REMOVED INCLUDE, BUT ARE NOT LIMITED TO, NUT GRASS, PUNCTURE VINE, MORNING GLORY, TORPEDO GRASS, BERMUDA GRASS, BAHIA GRASS, CRAB GRASS AND OTHER NOXIOUS AND/OR INVASIVE WEEDS. THE SITE IS TO BE MAINTAINED WEED FREE THROUGHOUT PLANTING OPERATIONS. TO PREPARE THE PLANTING AREAS, SPRAY HERBICIDE WITH MANUFACTURER'S RECOMMENDATIONS, WAIT TWO WEEKS, SPRAY A SECOND TIME, WAIT TWO WEEKS, SPRAY A THIRD TIME.

D. UPON ARRIVAL, PLANTS SHALL BE PROTECTED AT THE SITE BY BEING THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. ALL TREES SHALL BE INSTALLED WITHIN 72 HOURS OF DELIVERY.
E. LABEL AT LEAST ONE PLANT OF EACH SPECIES WITH A SECURELY ATTACHED WATERPROOF TAG BEARING THE BOTANICAL NAME.

F. ALL PLANTS THAT DO NOT CONFORM TO SPECIFICATIONS WILL BE REJECTED. ANY PLANTS IN SHOCK (WITH DEAD OR DYING LEAVES), HAVE ROOTS THAT ARE SEVERELY BOUND IN THE CONTAINER OR THAT ARE DEAD WILL BE REJECTED. CONTAINER GROWN PLANTS SHOULD HAVE SUFFICIENT ROOTS TO HOLD THE CONTAINER SOIL TOGETHER AFTER REMOVAL FROM THE CONTAINER.

LANDSCAPE INSTALLATION NOTES CONT'D:

G. IRRIGATION MUST BE INSTALLED BEFORE PLANTS ARE PLANTED. PLANT PLANTS FLUSH WITH FINISHED GRADE SOIL. BACK FILL WITH SOIL IN 12 INCH LAYERS. WATER IN AND COMPACT EACH LAYER TO ELIMINATE AIR VOIDS. IMMEDIATELY APPLY AT LEAST 2 INCHES OF WATER. AFTER PLANTING, REMOVE EXCESS SOIL AND RAKE PLANT BEDS TO A SMOOTH EVEN SURFACE. AT THE PLANTING BED EDGES, TAPER SOIL GRADE DOWN TO A LEVEL BELOW THE TOP OF THE ADJACENT STRUCTURE OR LAWN TO ALLOW FOR A 3 INCH LAYER OF MULCH.

H. ALL SOD PLANTED WITH NO GAPS BETWEEN SOD PIECES, ROLLED AND SEEMS SHALL BE SANDED AFTER INSTALLATION. PEG ALL SOD ON SLOPES GREATER THAN 3:1

I. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY AND PLUMB CONDITION OF ALL TREES AND SHRUBS AND SHALL BE LEGALLY LIABLE FOR ANY DAMAGE CAUSED BY INSTABILITY OF ANY PLANT MATERIALS. STAKING OF TREES OR SHRUBS SHALL BE DONE IN ACCORDANCE WITH PLANS AND SPECIFICATIONS.

J. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION PROTECTION AND SLOPE STABILIZATION BY OWNER-APPROVED METHODS.

K. ALL PLANTS AND PLANTING AREAS SHALL BE TOP DRESSED WITH 3 INCHES OF PINE STRAW MULCH. ALL TREES SHALL HAVE A 3 INCH THICK, 36 INCH RADIUS (FROM THE TRUNK) MULCH RING PLACED AROUND THE BASE OF THE TRUNK. PERENNIALS AND GROUNDCOVER 1 1/2 INCHES MULCH.

L. IRRIGATION TO BE INSTALLED BEFORE PLANTING INSTALLATION BEGINS. CONTRACTOR SHALL COORDINATE ALL PLANTING WORK WITH IRRIGATION WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HAND WATERING AS REQUIRED TO SUPPLEMENT IRRIGATION WATERING AND RAINFALL. CONTRACTOR SHALL BE RESPONSIBLE FOR HAND WATERING IN ALL PLANTING AREAS, REGARDLESS OF THE STATUS OF EXISTING OR PROPOSED IRRIGATION.

M. CONTRACTOR SHALL RE-GRADE ALL AREAS DISTURBED BY PLANT REMOVAL, RELOCATION AND/OR INSTALLATION WORK.

N. ALL TREE AND SHRUB ROOTBALLS SHALL BE A MINIMUM OF 5 FEET HORIZONTAL SEPARATION FROM ANY UTILITY.

O. ALL TREES, SHRUBS, AND GROUNDCOVER SHALL BE PLANTED FLUSH WITH FINISHED GRADE.

14. **TREES**

A. IRRIGATION MUST BE INSTALLED BEFORE TREES ARE PLANTED.

B. PLANT TREES WITH THE ROOTBALL FLUSH WITH THE FINISHED GRADE SOIL. DO NOT PLACE SOIL OR MULCH ON TOP OF THE ROOTBALL. BEFORE PLANTING, EXPOSE THE ROOT FLARE OF EACH TREE. RESTORE GRADE AT BASE OF TRUNK TO ACTUAL ROOT FLARE ELEVATION. DO NOT MOUND MULCH OR SOIL AGAINST ROOT FLARE OF TRUNK; REMOVE WIRE BASKET AND BURLAP ON ALL SIDES OF ROOTBALL TO EXPOSE ROOTS TO SOIL.

C. ALL TREES WITHIN SOD AREAS AND GROUNDCOVER AREAS TO RECEIVE A 4 FOOT RADIUS (FROM THE TRUNK) AREA OF PINE STRAW MULCH. DO NOT MOUND MULCH AGAINST ROOT FLARE OR TRUNKS OF TREES OR SHRUBS.

D. TREES WITH GIRDLING ROOTS, BROKEN ROOTBALLS, WOUNDS, BARK INJURIES ON THE MAJOR TRUNKS, TIP DIE BACK OR IN SHOCK (WITH DEAD OR DYING LEAVES) WILL BE REJECTED.

E. IF TREES ARE DELIVERED IN METAL BASKETS, REMOVE THE TOP 2/3 OF THE METAL BASKETS AND BURLAP JUST PRIOR TO PLANTING. IF TREES ARE BURIED IN THE FULL METAL BASKETS, A FINE OF $2,000 PER TREE WILL BE IMPOSED BY THE OWNER.

F. BALLED AND BURLAP TREES SHOULD BE DUG AND PREPARED FOR SHIPMENT IN A MANNER THAT WILL NOT DAMAGE ROOTS, BRANCHES, SHAPE AND FUTURE DEVELOPMENT AFTER PLANTING. IN AS MUCH AS POSSIBLE, CONTRACTOR TO ENSURE THAT TREES SHOULD BE ROOT PRUNED A MINIMUM OF 30 DAYS PRIOR TO DIGGING AND HARDENED OFF AT THE NURSERY FOR A MINIMUM OF 30 DAYS PRIOR TO SHIPPING. IN ADDITIONAL TO ROOTBALL IRRIGATION, THE NURSERY SHOULD PROVIDE OVERHEAD MIST IRRIGATION FOR THE DURATION OF THIS PERIOD. THE PRODUCT RECEIVED ON SITE SHOULD HAVE A FIRM BALL WITH NATURAL SOILS. DRIED, CRACKED OR BROKEN ROOTBALLS WILL BE REJECTED. ROOTBALLS SHOULD BE SIZED AT A MINIMUM DIAMETER RATIO OF 12 INCHES OF ROOTBALL FOR EACH 1 INCH OF TREE CALIPER. ALL FIELD GROWN TREES MUST BE FROM A 'ROOTS PLUS' GROWERS NURSERY.

G. AFTER EXCAVATION OF TREE PLANTING PIT, PLACE TREE IN PIT AND BACK FILL WITH SOIL IN 12 INCH LAYERS. WATER IN AND COMPACT EACH LAYER TO ELIMINATE AIR VOIDS. IMMEDIATELY APPLY AT LEAST 8 INCHES OF WATER. AFTER PLANTING, REMOVE EXCESS SOIL AND RAKE PLANT BEDS TO A SMOOTH EVEN SURFACE. RAKE SMOOTH AND THEN CREATE A 4 INCH HEIGHT SOIL SAUCER APPROXIMATELY 3 FEET RADIAL TO THE TRUNK.

H. PALM HEIGHTS ARE INDICATED AT THE PALM LOCATIONS ON THE PLANS. REFER TO CLEAR TRUNK (CT) SPECIFICATIONS ON THE PLANT SCHEDULE.

15. **INSPECTIONS**

A. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT A MINIMUM OF 7 DAYS IN ADVANCE OF THE PLANT MATERIAL DELIVERY TO THE SITE. THE LANDSCAPE ARCHITECT SHALL INSPECT THE PLANT MATERIAL **BEFORE** THE PLANTS AND TREES HAVE BEEN UNLOADED.

B. THE LANDSCAPE ARCHITECT SHALL HAVE THE RIGHT, AT ANY STAGE OF THE OPERATIONS, TO REJECT ANY AND ALL WORK AND/OR MATERIALS WHICH, IN HER OPINION, DO NOT MEET WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS.

C. TREE CALIPER SIZES NOTED ARE MINIMUM. ALL CONTAINER SIZES NOTED ARE MINIMUM; INCREASE SIZE, IF NECESSARY, TO PROVIDE PLANT HEIGHT AND SPREAD PER SPECIFICATIONS.

D. ALL INSTALLATION OF PLANT MATERIAL SHALL COMPLY WITH APPLICABLE JURISDICTIONAL CODES. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS ASSOCIATED WITH THIS WORK.

E. PRIOR TO PLANTING INSTALLATION, THE CONTRACTOR SHALL CONFIRM THE AVAILABILITY OF ALL THE SPECIFIED PLANT MATERIALS. SUBMIT DATED PHOTOGRAPHS OF TREE MATERIAL, PLANT MATERIAL AND SPECIMENS TO THE LANDSCAPE ARCHITECT FOR REVIEW. IF PLANT MATERIAL DOES NOT COMPLY WITH THE REQUIREMENTS AS SPECIFIED HEREIN, THE LANDSCAPE ARCHITECT AND OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT SUCH PLANTS AND REQUIRE THE CONTRACTOR TO REPLACE REJECTED MATERIALS OR WORK AND CONTINUE SPECIFIED MAINTENANCE UNTIL RE-INSPECTED AND FOUND TO BE ACCEPTABLE.

16. **PRE-INSTALLATION PLANT LAYOUT INSPECTION** CONTRACTOR SHALL LAYOUT ALL PLANT MATERIAL PRIOR TO INITIATING INSTALLATION FOR THE REVIEW AND APPROVAL OF THE LANDSCAPE ARCHITECT. THE LOCATION OF ALL PLANT MATERIAL IS SUBJECT TO FIELD CHANGE. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT A MINIMUM OF 5 WORKING DAYS TO SCHEDULE INPSECTION OF PLANT MATERIAL LAYOUT PRIOR TO PLANTING.

THE LOCATION OF PLANTS, AS SHOWN IN THESE PLANS, ARE APPROXIMATE. THE FINAL LOCATIONS MAY BE ADJUSTED TO ACCOMMODATE UNFORESEEN FIELD CONDITIONS, TO COMPLY WITH SAFETY CRITERIA, TO AVOID CREATING UNSAFE CONDITIONS, OR AS OTHERWISE DIRECTED BY THE LANDSCAPE ARCHITECT. ALL ADJUSTMENTS SHALL BE VERIFIED AND APPROVED BY THE LANDSCAPE ARCHITECT.

17. **TREE SAVE AREAS** ALL TREE SAVE AREAS SHALL BE COVERED WITH 3" OF PINE STRAW MULCH. IN AREAS WITH EXISTING PLANTS, CONTRACTOR SHALL EXERCISE CAUTION IN PLACING OF MULCH TO PROTECT PLANTS. DO NOT STORE OR USE MATERIALS OR EQUIPMENT WITHIN THE DRIPLINE OF ANY TREE TO BE RETAINED UNLESS THE ACTIVITY IS BEING DONE TO PROTECT TREES. CLEARING OF VEGETATION WITHIN THE DRIPLINE OF TREES DESIGNATED FOR PRESERVATION SHALL ONLY BE BY HAND OR LIGHT RUBBER WHEELED EQUIPMENT THAT WILL NOT DAMAGE TREE ROOTS. SEE TREE PROTECTION BARRICADE PLAN. A $1,000 PENALTY WILL BE APPLIED IF THESE GUIDELINES ARE NOT FOLLOWED.

18. **EXISTING VEGETATION TO REMAIN** ALL EXISTING VEGETATION TO REMAIN SHALL BE PROTECTED. ANY PLANT/TREE DAMAGE SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. SEE TREE PROTECTION PLANS FOR DETAILS.

19. **STAKING** CONTRACTOR SHALL INSURE THAT ALL TREES ARE MAINTAINED STRAIGHT AND PLUMB. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PREVENT PLANTS AND TREES FROM FALLING OR BEING BLOWN OVER, TO RE-STRAIGHTEN AND REPLANT ALL PLANTS WHICH LEAN OR FALL AND TO REPLACE ALL PLANTS WHICH ARE DAMAGED DUE TO LACK OF GUYING OR STAKING. PLANTS BLOWN OVER BY HIGH WINDS UNDER 39 MPH SHALL NOT BE CAUSE FOR ADDITIONAL EXPENSE TO THE OWNER, BUT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. DAMAGED PLANTS SHALL BE BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. PLANTS BLOWN OVER BY HIGH WINDS DUE TO A TROPICAL STORM (39-73 MPH) OR A HURRICANE (74 MPH AND HIGHER) PER THE NATIONAL WEATHER SERVICE, THE CONTRACTOR SHALL NOT BE RESPONSIBLE AND THE OWNER SHALL PAY THE CONTRACTOR TO RE-GUY THE PLANTS.

20. **WATERING** IRRIGATION TO BE IN PLACE BEFORE LANDSCAPE INSTALLATION COMMENCES. ALL PLANTS SHALL BE THOROUGHLY WATERED AT TIME OF PLANTING AND KEPT ADEQUATELY WATERED UNTIL TIME OF FINAL INSPECTION ACCEPTANCE. BEGIN WATER ESTABLISHMENT PERIOD IMMEDIATELY. PROVIDE SUFFICIENT QUANTITY OF WATER TO SATURATE THE SOIL 18 INCHES DEEP AND THROUGHOUT THE PLANTING BACKFILL AREA DURING THE CONTRACT MAINTENANCE PERIOD. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HAND WATERING AS REQUIRED UNTIL PLANT MATERIALS ARE WELL ESTABLISHED, TO SUPPLEMENT IRRIGATION WATERING AND RAINFALL, AND SHALL BE RESPONSIBLE FOR HAND WATERING IN ALL LANDSCAPE AREAS WHERE THE EXISTING OR PROPOSED IRRIGATION IS FOR WHATEVER REASON NOT OPERATING OR NOT OPERATING CORRECTLY.

21. **CLEAN SITE** CONTRACTOR SHALL CLEAN THE WORK AREAS AT THE END OF EACH WORKING DAY. RUBBISH AND DEBRIS SHALL BE COLLECTED AND DESPOSED OF DAILY. ALL MATERIALS, PRODUCTS, AND EQUIPMENT SHALL BE STORED IN AN ORGANIZED FASHION AS DIRECTED BY THE OWNER'S REPRESENTATIVE.

LANDSCAPE INSTALLATION NOTES CONT'D:

22. **VEHICLE PARKING AND HOLDING AREA** CONTRACTOR AND EMPLOYEE VEHICLE PARKING AND LANDSCAPE HOLDING AREAS SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE.

23. **CONSTRUCTION ACCESS, SCHEDULING AND COORDINATION** CONSTRUCTION ACCESS SHALL BE INDICATED BY THE OWNER'S REPRESENTATIVE. COORDINATION OF HEAVY EQUIPMENT AND MATERIALS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING AND COORDINATION OF WORK WITH OTHER TRADES AND THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL COORDINATE ACCESS AND STAGING AREAS WITH THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL TAKE WHATEVER MEANS THAT MAY BE NECESSARY TO FULLY UNDERSTAND ALL THE ACCESS ROUTES AND CONSTRUCTION SCHEDULES IN ORDER TO PROVIDE A COMPLETE AND FINISHED PROJECT ON SCHEDULE. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING EROSION AND SEDIMENTATION CONTROL MEASURES DURING CONSTRUCTION. PROVIDE ADDITIONAL MEASURES AS NECESSARY TO MINIMIZE ADVERSE IMPACTS IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES.

24. **SAFETY** THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SAFETY MEASURES DURING CONSTRUCTION OPERATIONS TO PROTECT THE PUBLIC ACCORDING TO ALL APPLICABLE CODES AND PROFESSIONAL AND LOCAL PRACTICES.

LANDSCAPE MAINTENANCE NOTES:

1. **MAINTENANCE PRIOR TO INITIAL ACCEPTANCE**

A. BEGIN MAINTENANCE IMMEDIATELY AFTER PLANTING AND CONTINUE UNTIL FINAL ACCEPTANCE. MAINTENANCE SHALL BEGIN AFTER EACH PLANT HAS BEEN INSTALLED AND SHALL CONTINUE UNTIL THE DATE OF FINAL COMPLETION WHEN THE 365 DAY PLANT WARRANTY PERIOD BEGINS.

B. PLANT MAINTENANCE SHALL INCLUDE WATERING, WEEDING, CULTIVATING, MULCHING, TIGHTENING AND REPAIRING OF GUYS, REPLACEMENT OF SICK OR DEAD PLANTS, RESETTING PLANTS, RESETTING PLANTS TO PROPER GRADES OR UPRIGHT POSITION, RESTORATION OF THE PLANTING SAUCER, AND ALL OTHER CARE NEEDED FOR PROPER GROWTH AND HEALTH OF THE PLANT MATERIAL.

2. INITIAL ACCEPTANCE / MAINTENANCE WARRANTY CONTRACT COMMENCEMENT

A. UPON COMPLETION OF ALL LANDSCAPING, AN INSPECTION FOR SUBSTANTIAL COMPLETION OF THE WORK SHALL BE HELD. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT FOR SCHEDULING OF THE INSPECTION AT LEAST SEVEN (7) DAYS PRIOR TO THE ANTICIPATED INSPECTION DATE. A PUNCH LIST WILL BE COMPLETED, IF APPLICABLE. WHEN THE PUNCH LIST HAS BEEN COMPLETED, A FINAL INSPECTION SHALL BE SCHEDULED. THE CONTRACTOR WILL NOTIFY THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT AT LEAST SEVEN (7) DAYS PRIOR TO THE FINAL ACCEPTANCE INSPECTION DATE.

B. **WARRANTY** CONTRACTOR TO SUBMIT A WRITTEN WARRANTY WILL COMMENCE ON THE DATE OF FINAL ACCEPTANCE THAT ALL PLANTS WILL REMAIN IN A "HEALTHY, VIGOROUS CONDITION" AND MEET SPECIFICATIONS FROM THE DATE OF INITIAL ACCEPTANCE AND UNTIL FINAL ACCEPTANCE (AFTER 365 DAYS). A WRITTEN NOTICE WILL BE GIVEN BY THE LANDSCAPE ARCHITECT TO THE CONTRACTOR STATING THE DATE WHEN THE 365 DAY MAINTENANCE AND GUARANTEE PERIOD BEGIN.

C. IF PLANTS ARE DIRECTED TO BE REPLACED, REPLACEMENT SHALL TAKE PLACE WITHIN 14 DAYS OF RECEIPT OF WRITTEN REPORT.

D. IF THE INSTALLATION CONTRACTOR WILL NOT BE PERFORMING THE MAINTENANCE DURING THE MAINTENANCE PERIOD, THE INSTALLATION CONTRACTOR WILL BE REQUIRED TO PERFORM MONTHLY INSPECTIONS AND DIRECT THE PROPER MAINTENANCE TECHNIQUES AND DIRECT ANY DEAD PLANT MATERIAL BE REPLACED. IF THERE IS A DISCREPANCY AT THE END OF THE MAINTENANCE PERIOD, THE INSTALLATION CONTRACTOR WILL BE RESPONSIBLE FOR ALL PROPER MAINTENANCE AND REPLACEMENT OF DEAD PLANT MATERIAL AT NO COST TO THE OWNER.

3. FINAL INSPECTION AND ACCEPTANCE/ END OF MAINTENANCE CONTRACT

A. WHEN 365 DAY MAINTENANCE WORK IS COMPLETE (PLANT MATERIAL GUARANTEE PERIOD), THE CONTRACTOR SHALL SUBMIT WRITTEN NOTIFICATION TO THE LANDSCAPE ARCHITECT. THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT WILL CONDUCT A FINAL ACCEPTANCE INSPECTION.WITHIN 14 DAYS OF WRITTEN NOTIFICATION.

B. PLANTS SHALL BE ACCEPTABLE IF THEY ARE IN A HEALTHY AND VIGOROUS CONDITION AND ARE IN COMPLIANCE WITH THE SPECIFICATIONS FOR EACH PLANT AS DETERMINED BY THE LANDSCAPE ARCHITECT. REPLACE REJECTED WORK/PLANTS WITHIN 14 DAYS OF NOTIFICATION. CONTINUE LANDSCAPE MAINTENANCE UNTIL WORK IS RE-INSPECTED AND FOUND ACCEPTABLE. PLANT REPLACEMENTS SHALL BE GUARANTEED FOR AN ADDITIONAL 30 DAYS. UPON SATISFACTORY COMPLETION, THE LANDSCAPE ARCHITECT WILL PROVIDE A WRITTEN FINAL ACCEPTANCE OF THE PLANT MATERIAL.

CLIENT:

HANSON WALTER & ASSOCIATES, INC.

8 BROADWAY #104
KISSIMMEE, FL 34741

PROJECT:

HARVEST GROVE TOWNHOMES

LOCATION:

1820, 1850 & 1860
PUFFIN ROAD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

SEAL:

REVISIONS	DATE
1	05-06-2025
2	06-09-2025

DESIGNED BY:	RJK
DRAWN BY:	RJK
CHECKED BY:	KAV
DATE:	03-07-2025

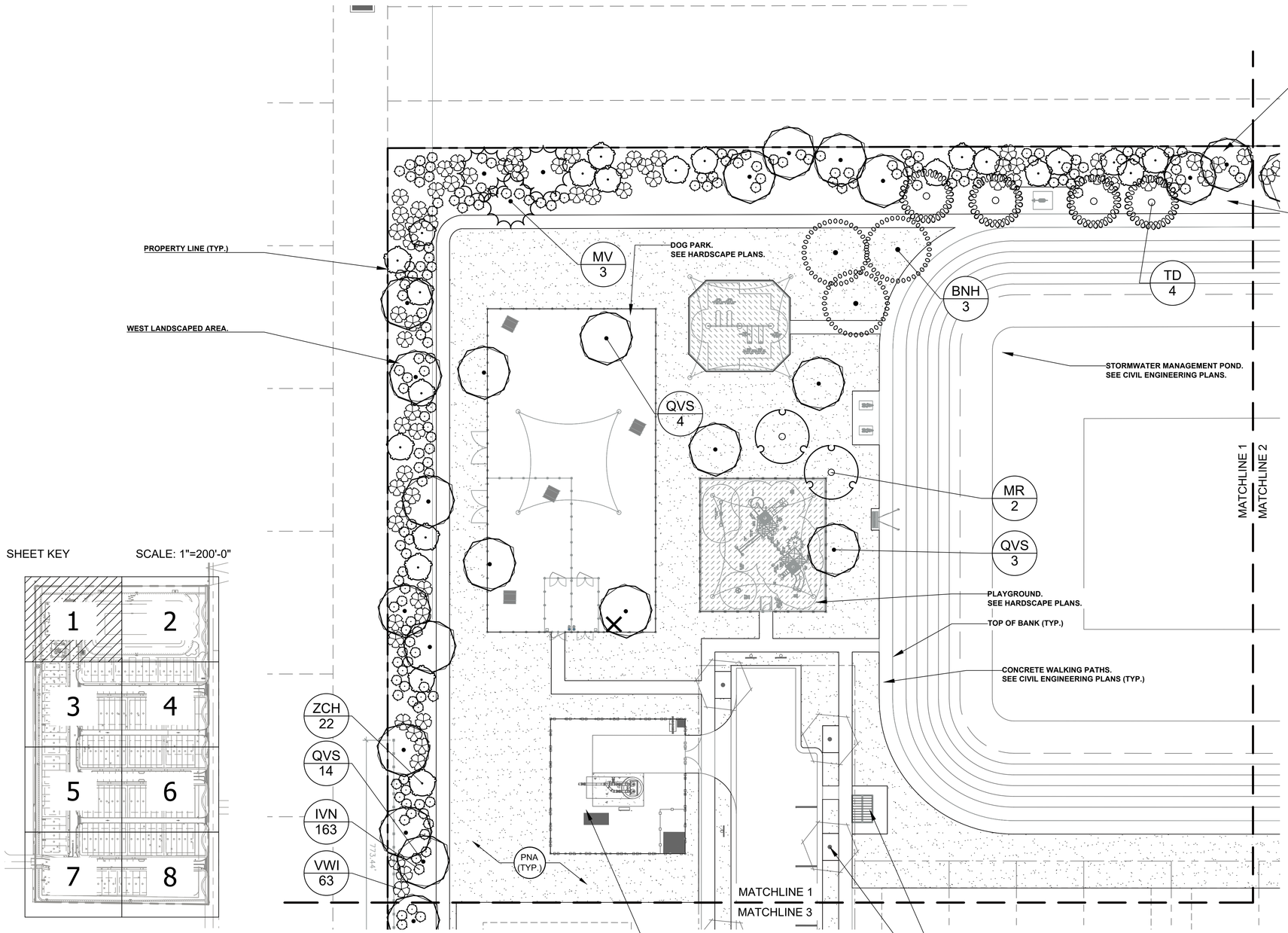
PROJECT NUMBER: 5557

SHEET TITLE:

LANDSCAPE NOTES

SHEET NUMBER:

LP005



SHEET KEY SCALE: 1"=200'-0"

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SCALE: 1" = 20'

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LANDSCAPE PLAN

SHEET NUMBER:

LP101

SHEET KEY

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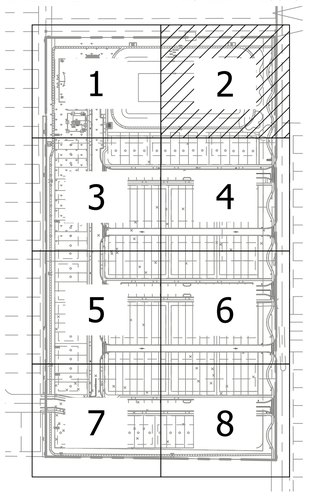

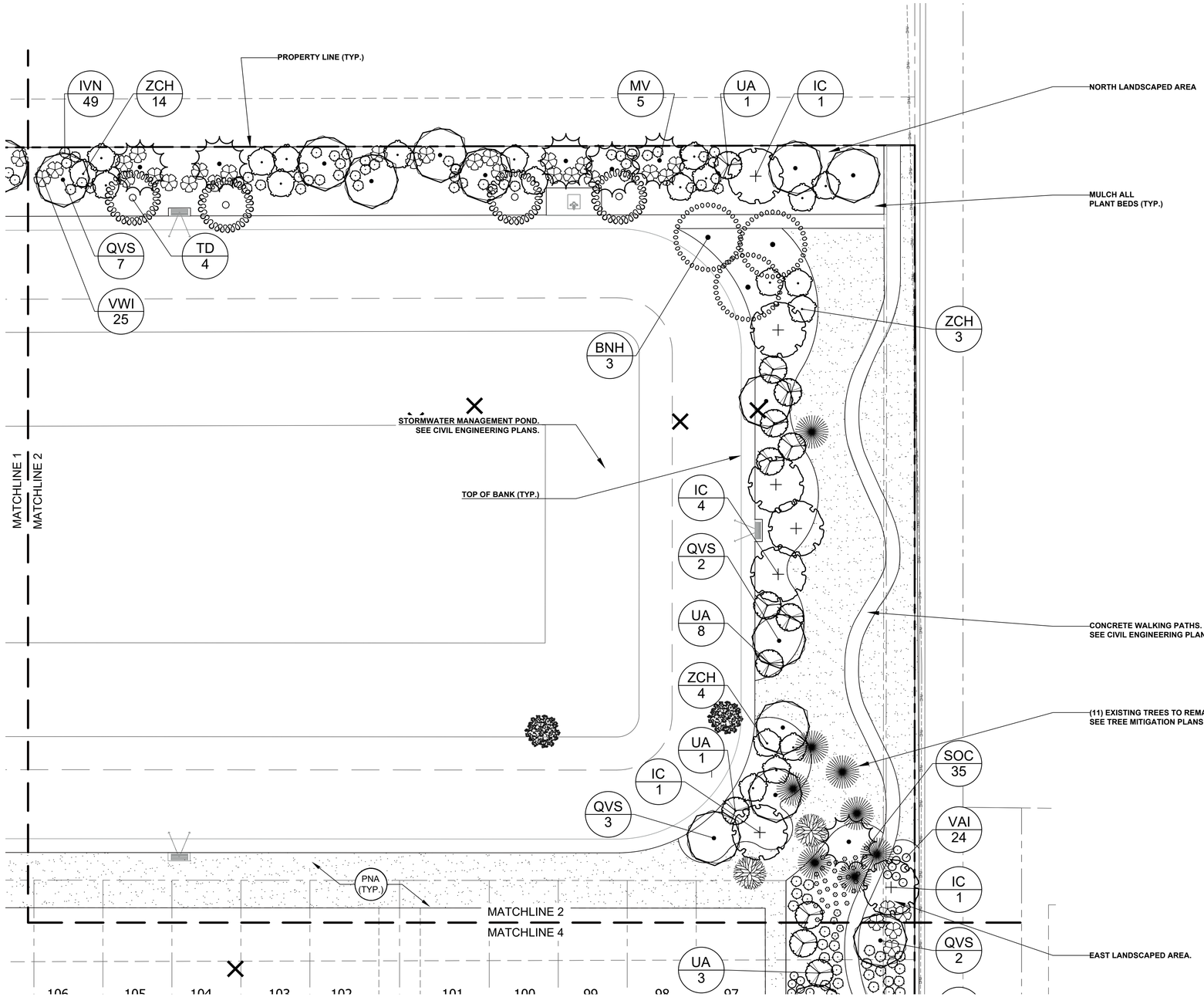

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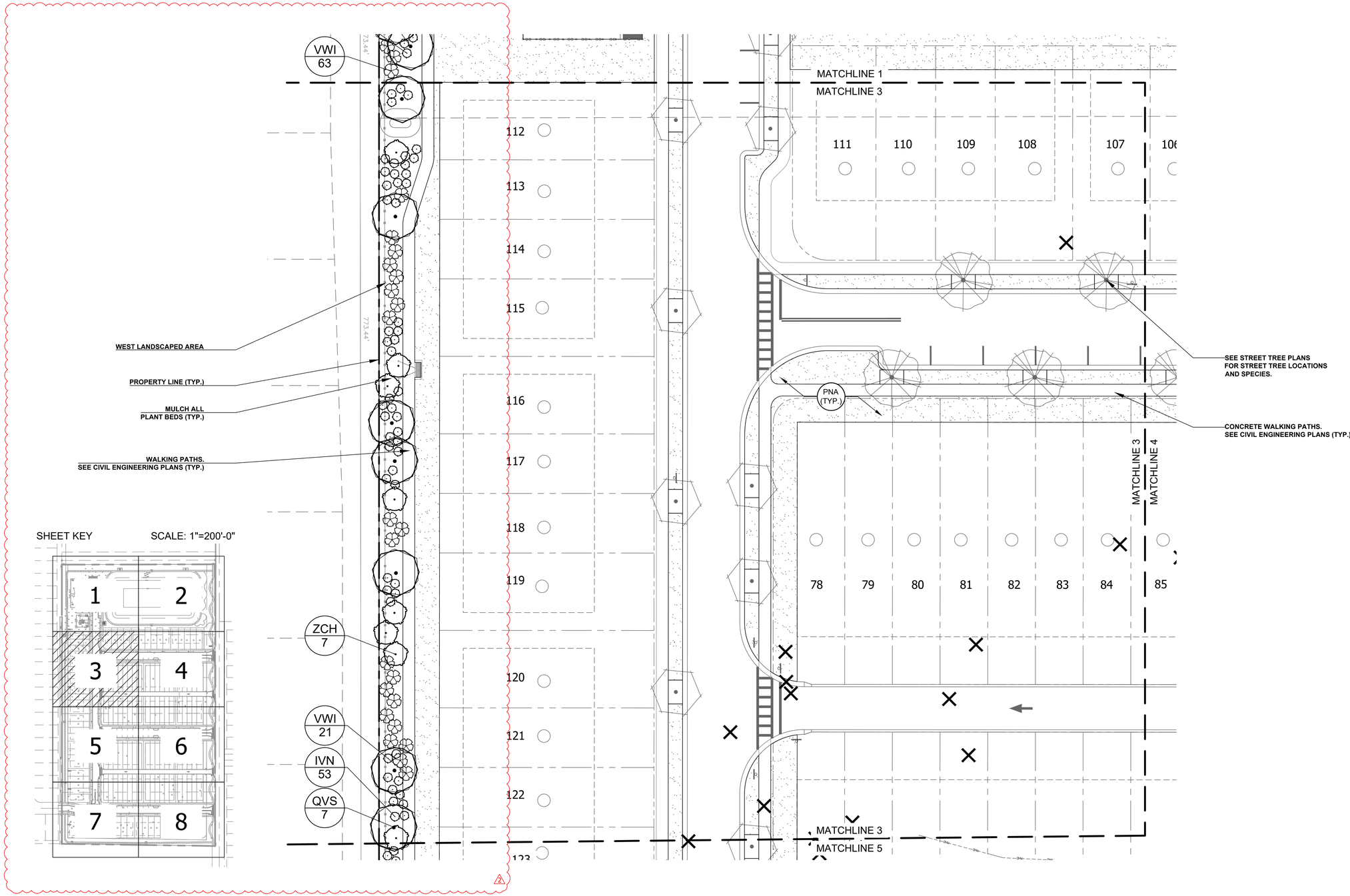

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LP103

SHEET KEY

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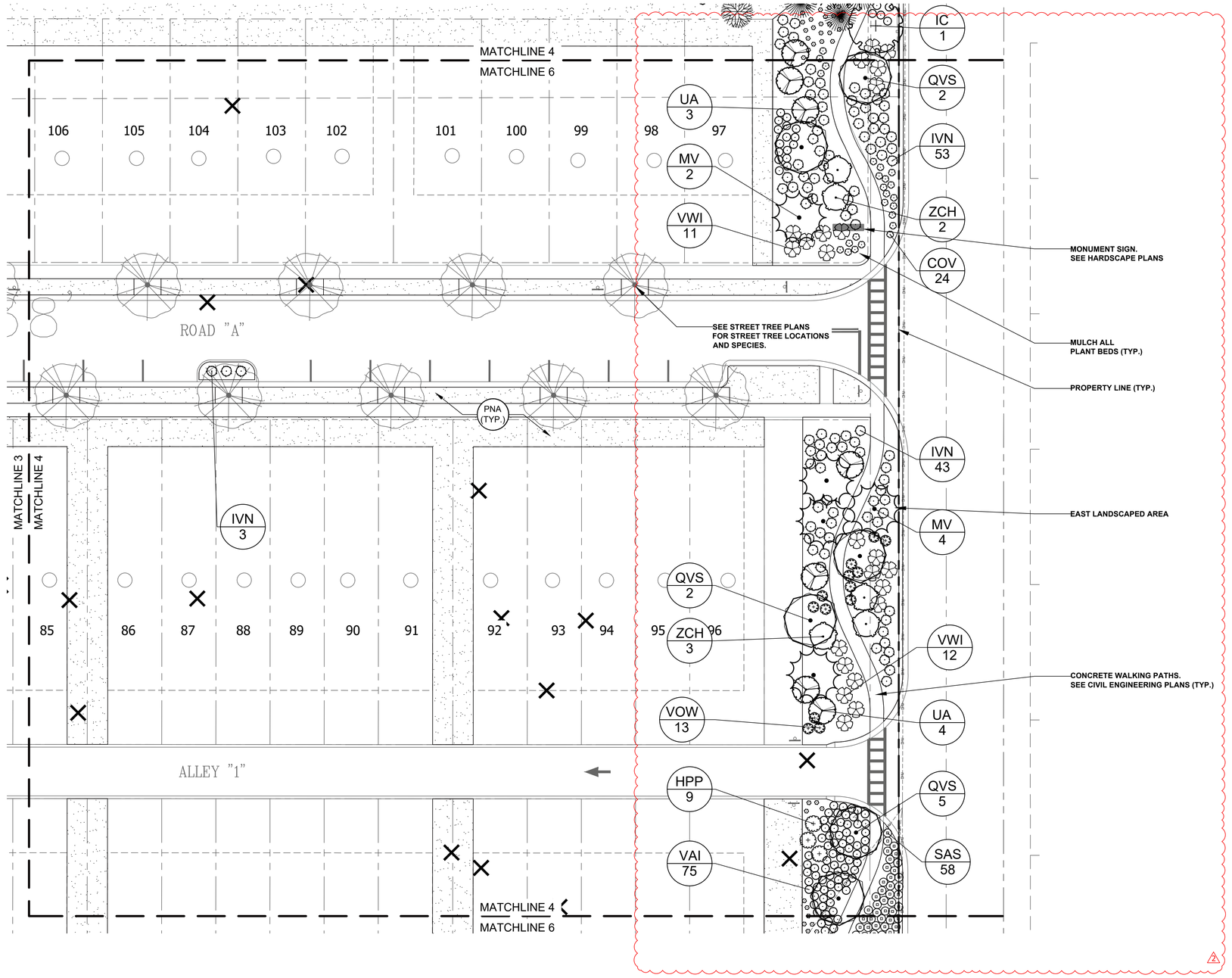

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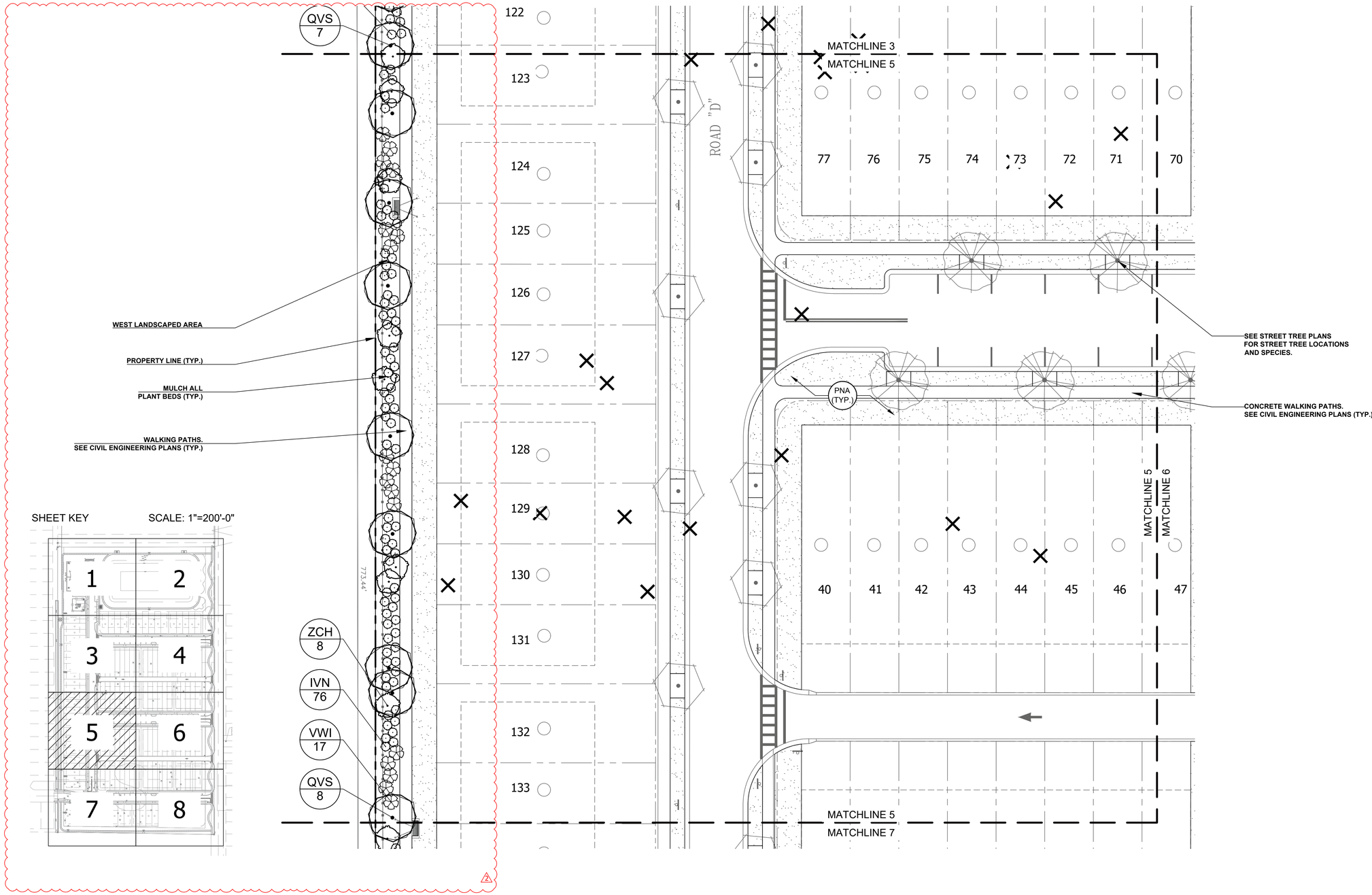
SHEET NUMBER:

LP104



Know what's below. Call before you dig. Dial 811 Or Call 800-282-7411

20 0 10 20 40

SCALE: 1" = 20'

NORTH

CLIENT:

HANSON WALTER & ASSOCIATES, INC.

8 BROADWAY #104
KISSIMMEE, FL 34741

PROJECT:

HARVEST GROVE TOWNHOMES

LOCATION:

1820, 1850 & 1860
PUFFIN ROAD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

SEAL:

REVISIONS	DATE
1	05-06-2025
2	06-09-2025

DESIGNED BY:	RJK
DRAWN BY:	RJK
CHECKED BY:	KAV
DATE:	03-07-2025

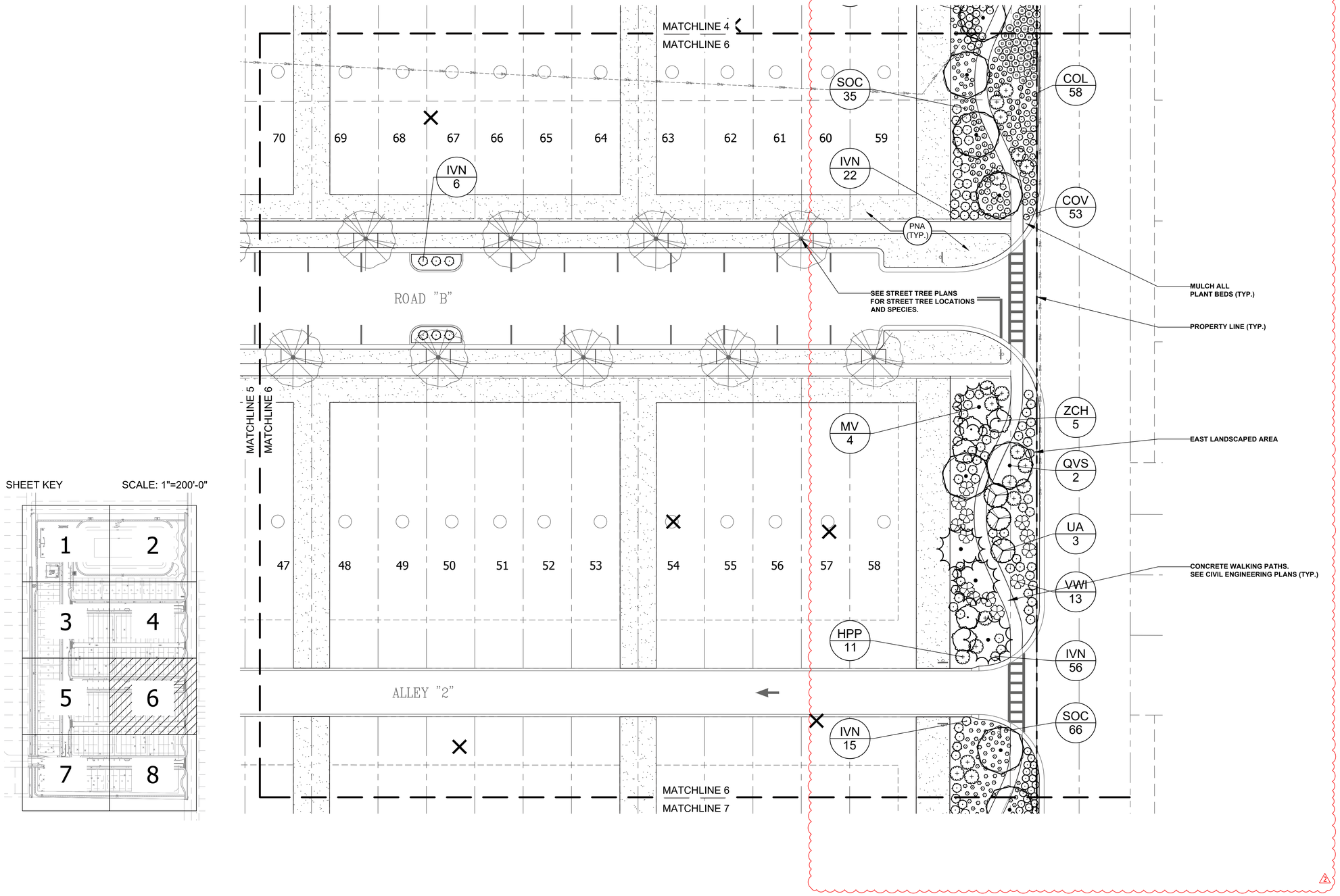
PROJECT NUMBER: 5557

SHEET TITLE:

LANDSCAPE PLAN

SHEET NUMBER:

LP105



SHEET KEY

SCALE: 1"=200'-0"

Know what's below. Call before you dig. Dial 811 Or Call 800-282-7411

20 0 10 20 40

SCALE: 1" = 20'

NORTH

CLIENT:

HANSON WALTER & ASSOCIATES, INC.

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KISSIMMEE, FL 34741

PROJECT:

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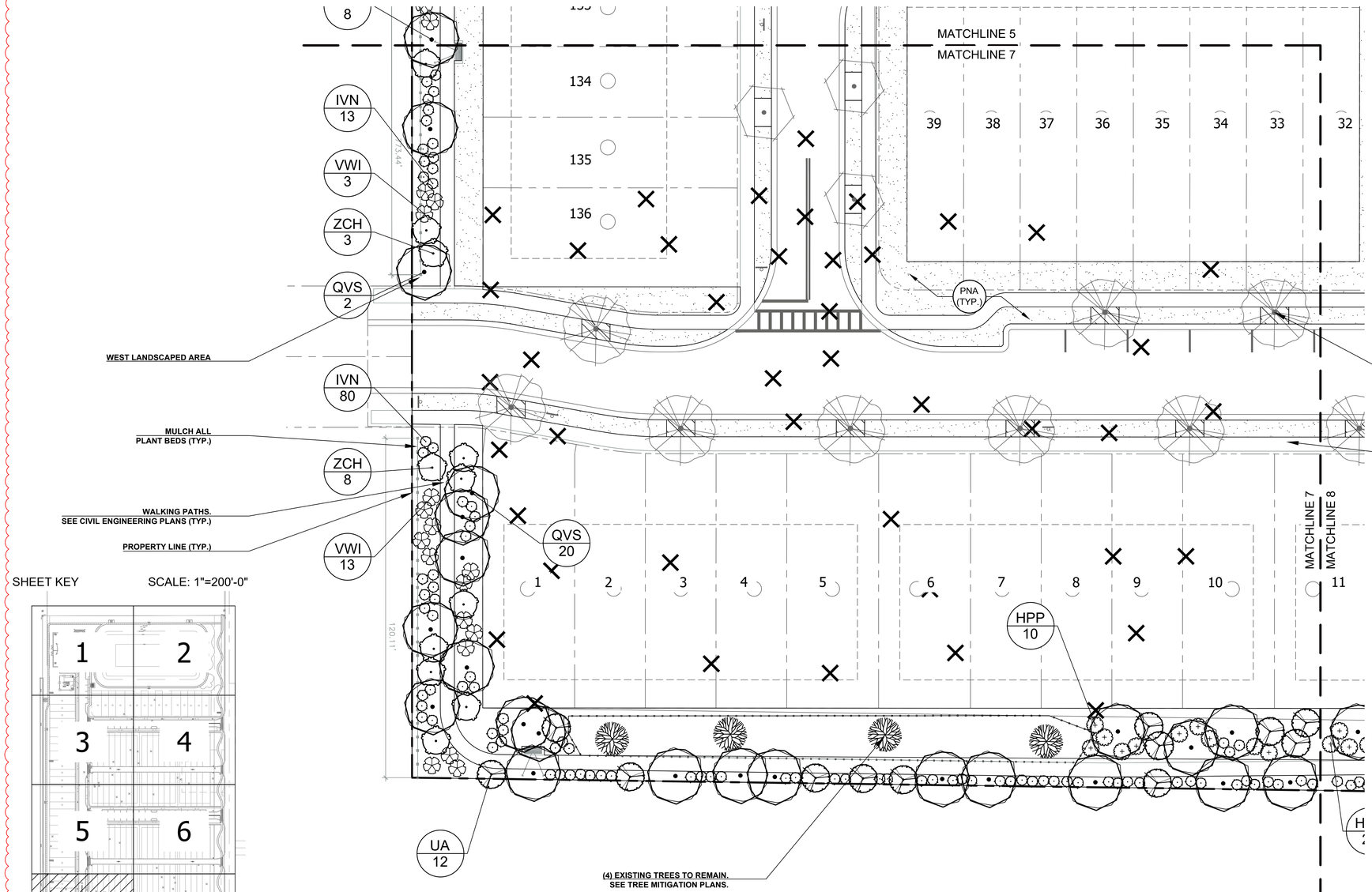
PROJECT NUMBER: 5557

SHEET TITLE:

LANDSCAPE PLAN

SHEET NUMBER:

LP106



SHEET KEY SCALE: 1"=200'-0"

Know what's below. Call before you dig. Dial 811 Or Call 800-282-7411

20 0 10 20 40

SCALE: 1" = 20'

NORTH

CLIENT:

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8 BROADWAY #104
KISSIMMEE, FL 34741

PROJECT:

HARVEST GROVE TOWNHOMES

LOCATION:

1820, 1850 & 1860
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ST. CLOUD, FL

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DRAWN BY:	RJK
CHECKED BY:	KAV
DATE:	03-07-2025

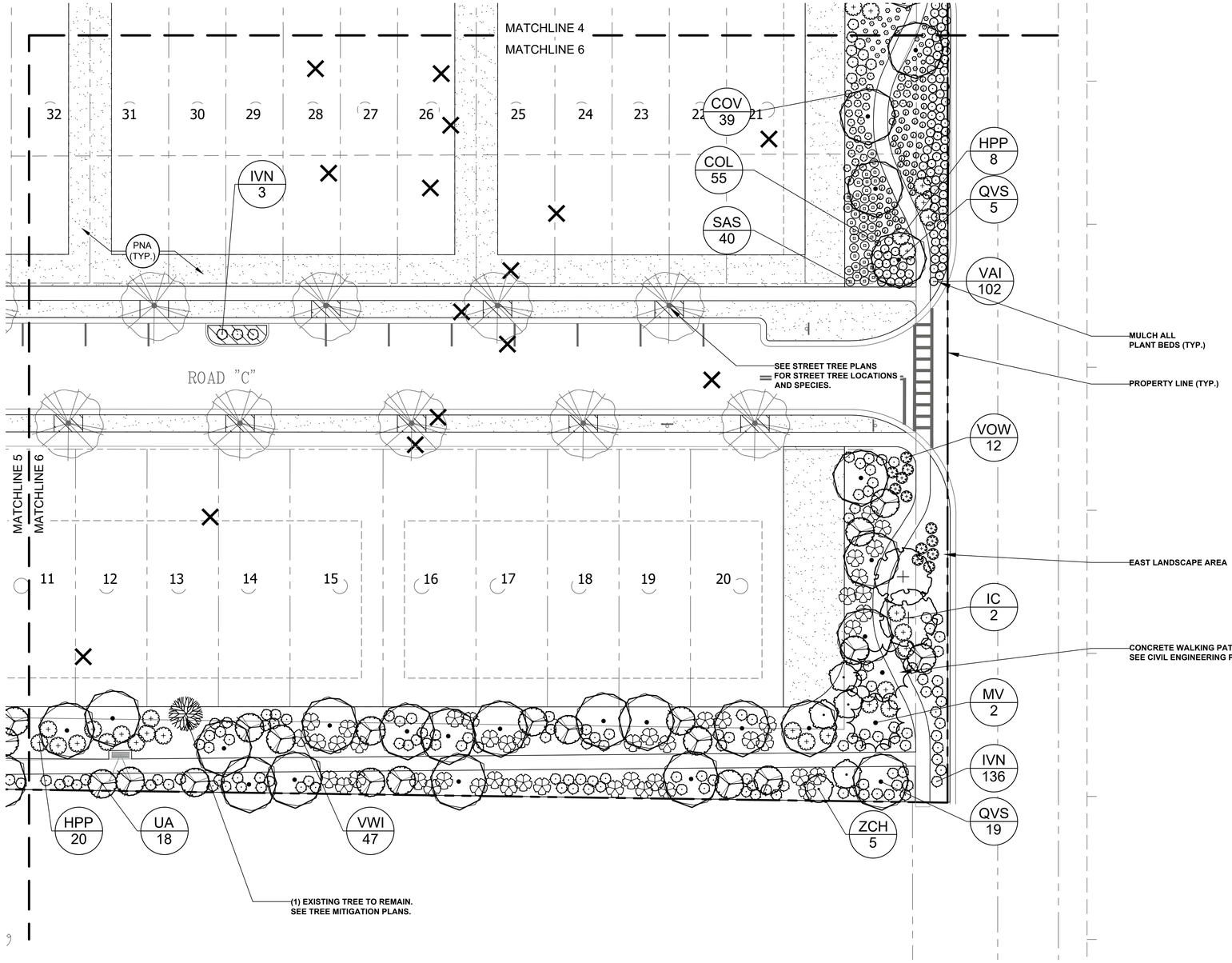
PROJECT NUMBER: 5557

SHEET TITLE:

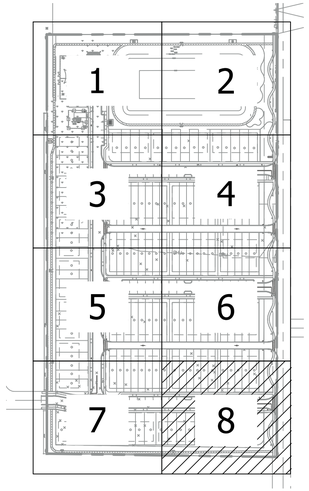
LANDSCAPE PLAN

SHEET NUMBER:

LP107



SHEET KEY SCALE: 1"=200'-0"



Know what's below. Call before you dig. Dial 811 Or Call 800-282-7411

20 0 10 20 40
SCALE: 1" = 20'

NORTH

CLIENT:

HANSON WALTER & ASSOCIATES, INC.
8 BROADWAY #104
KISSIMMEE, FL 34741

PROJECT:

HARVEST GROVE TOWNHOMES

LOCATION:
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CHECKED BY:	KAV
DATE:	03-07-2025

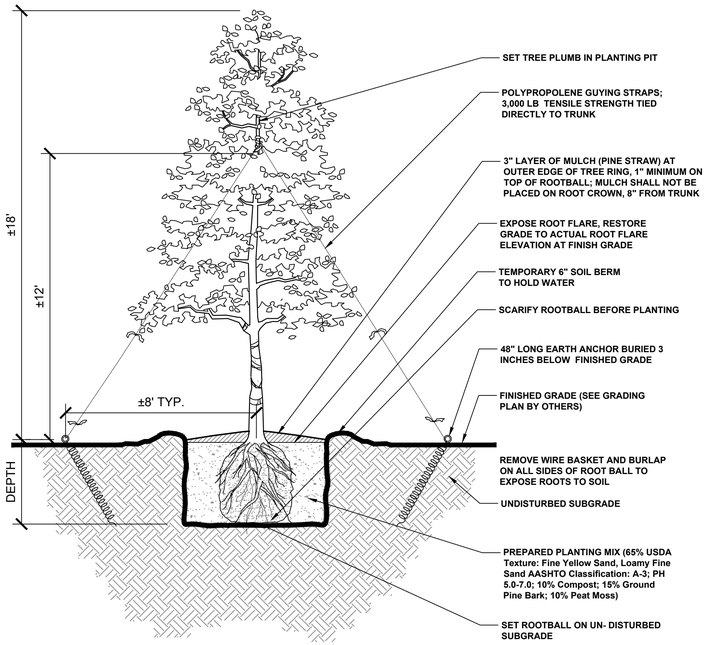
PROJECT NUMBER: 5557

SHEET TITLE:

LANDSCAPE PLAN

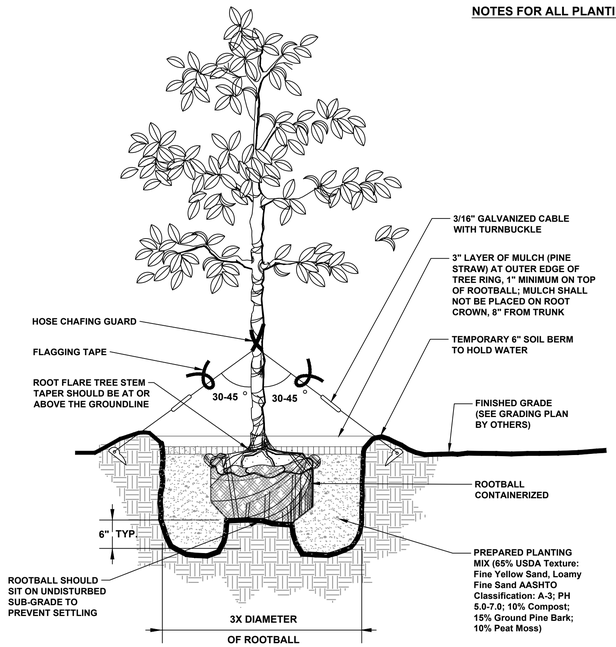
SHEET NUMBER:

LP108



LARGE TREE PLANTING & GUYING DETAIL

N.T.S.

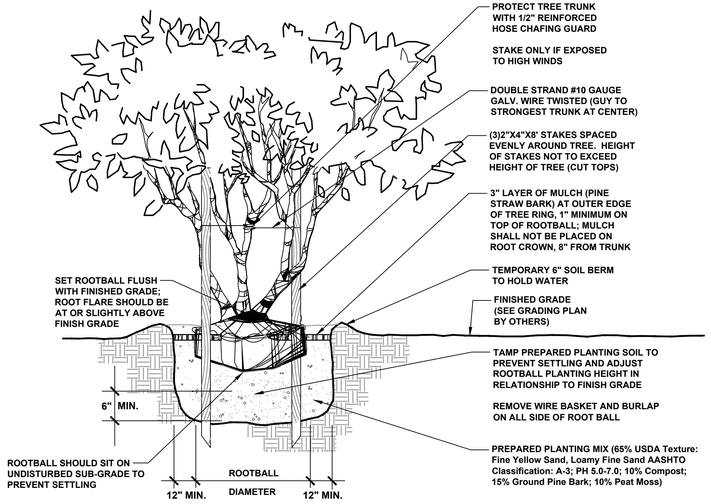


SMALL TREE PLANTING & GUYING DETAIL

N.T.S.

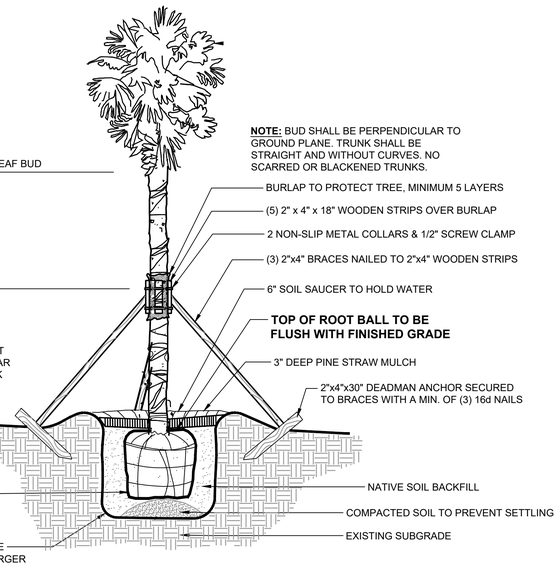
NOTES FOR ALL PLANTINGS:

1. DO NOT MOUND OR INSTALL MULCH AGAINST THE TRUNK OR STEM OF TREES AND SHRUBS OR THE CROWN OF PERENNIALS AND GROUNDCOVERS. THERE SHOULD BE FREE AND OPEN AIR CIRCULATION AROUND THE TRUNK OF THE PLANT AND THE GROUND IN THE IMMEDIATE AREA AT THE BASE OF THE TRUNK.
2. CONTRACTOR TO REMOVE ALL WIRE BASKETS AND BURLAP FROM B&B PLANTS LEAVING ONLY THE FABRIC AND WIRE ON THE VERY BOTTOM OF BALL IF IMPOSSIBLE TO REMOVE.



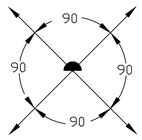
MULTI-TRUNK TREE PLANTNG DETAIL

N.T.S.



SABAL PALM PLANTING/ DEADMAN ANCHOR STAKING DETAIL

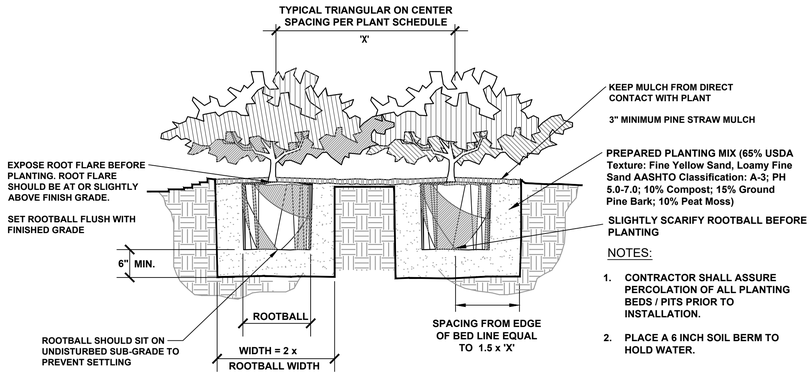
N.T.S.



STAKING DIAGRAM
PLAN VIEW

NOTES:

1. ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION. SEE LANDSCAPE NOTES ON SEPARATE SHEET.
2. WATERING REQUIREMENTS ARE DIFFERRENT FOR EACH TREE SPECIES AND SOIL CONDITION. CONSULT AN ARBORIST AS TO THE APPROPRIATE WATER REGIMEN.
3. DISCARD SUBGRADE REMOVED FROM PLANTING PIT AND REPLACE WITH PREPARED SOIL MIX, PER SPECIFICATIONS. PLACE NEW SOIL MIX AROUND ROOTBALL IN SIX-INCH LAYERS, FIRMLY TAMPING AND WATERING EACH LAYER UNTIL THE PLANTING PIT IS FILLED TO FINISHED GRADE LEVEL.
4. TREES UNDER 3 INCH CALIPER DO NOT REQUIRE TO BE GUYED; HOWEVER CONTRACTOR IS RESPONSIBLE TO ENSURE TREES DO NOT BLOW OVER DURING MAINTENANCE PERIOD.

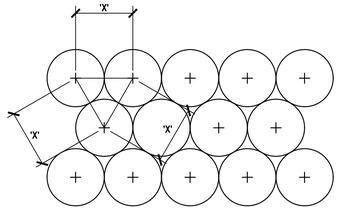


NOTES:

1. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING BEDS / PITS PRIOR TO INSTALLATION.
2. PLACE A 6 INCH SOIL BERM TO HOLD WATER.

GROUNDCOVER & SHRUB PLANTING DETAIL

N.T.S.



ALL SHRUBS & GROUNDCOVER MASSES TO USE TRIANGULAR SPACING EXCEPT WHERE NOTED. REFER TO PLANT SCHEDULE FOR INDIVIDUAL PLANT SPACING 'X'

TYPICAL PLANT SPACING DETAIL

N.T.S.

CLIENT:

HANSON WALTER & ASSOCIATES, INC.

8 BROADWAY #104
KISSIMMEE, FL 34741

PROJECT:

HARVEST GROVE TOWNHOMES

LOCATION:

1820, 1850 & 1860
PUFFIN ROAD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
611 North Mills Avenue #536433
Orlando, FL 32853-6433
(321) 388-4781

SEAL:

REVISIONS	DATE
1	05-06-2025
2	06-09-2025

DESIGNED BY:	RJK
DRAWN BY:	RJK
CHECKED BY:	KAV
DATE:	03-07-2025

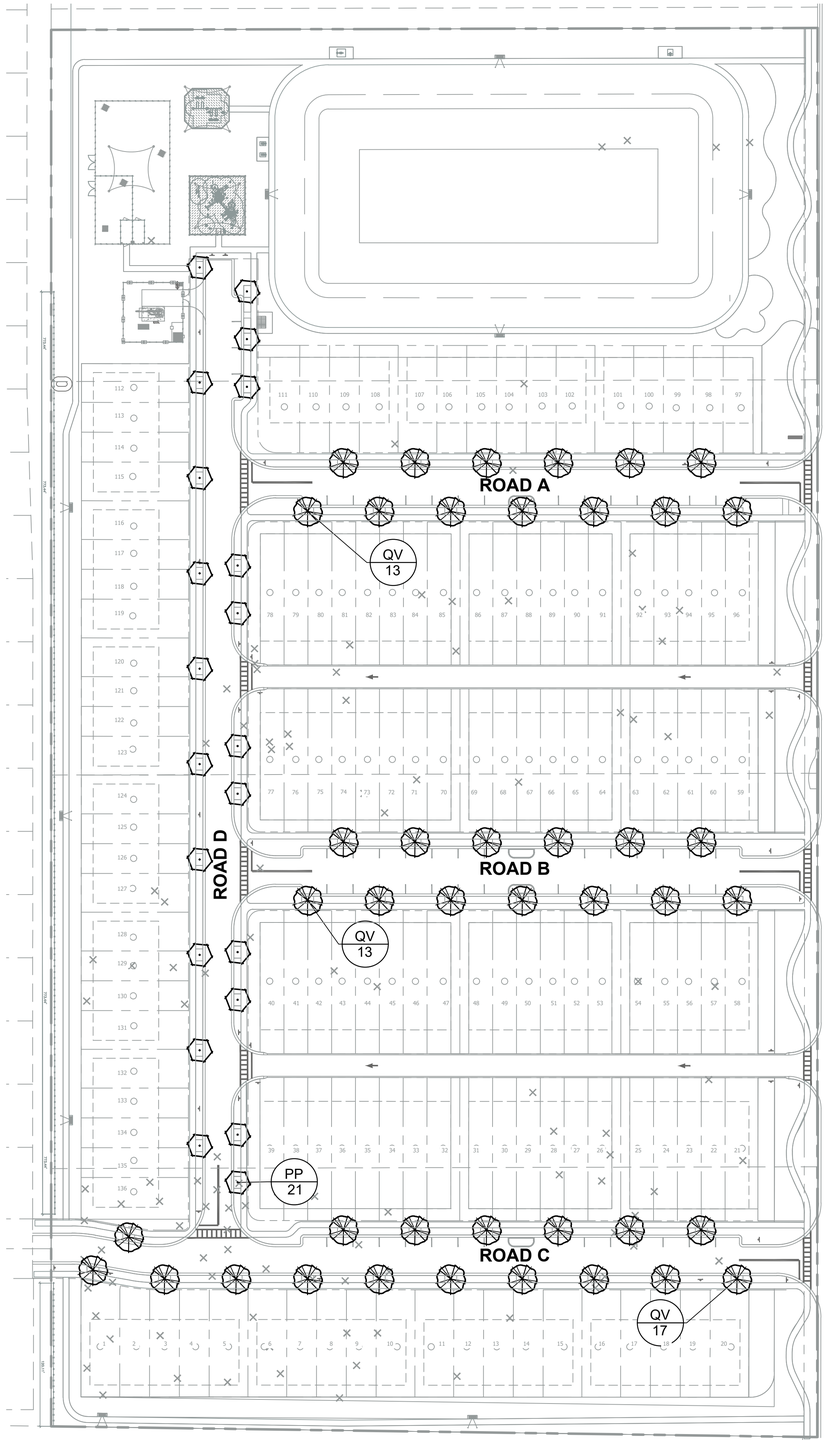
PROJECT NUMBER: 5557

SHEET TITLE:

LANDSCAPE INSTALLATION DETAILS

SHEET NUMBER:

LP201



STREET TREE LEGEND

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE
STREET TREES							
	PP	21	PINUS PALUSTRIS	LONGLEAF PINE	65 GAL. / 3" CAL.	12-14' HT. X 6-8' SP.	AS SHOWN
	QV	43	QUERCUS VIRGINIANA 'SKY CLIMBER'	SKY CLIMBER SOUTHERN LIVE OAK	65 GAL. / 3" CAL.	10-12' HT. X 8-10' SP.	AS SHOWN

STREET TREE CALCULATIONS (PER CITY LDC SEC. 4.8.5.)

INTERNAL ROADWAY PLANTING (PER ARTICLE VIII, SEC. 8.5.11)

ROAD A 519 LF/ 40 LF	= 13 LARGE TREES REQUIRED = 13 LARGE TREES PROVIDED
ROAD B 517 LF/ 40 LF	= 13 LARGE TREES REQUIRED = 13 LARGE TREES PROVIDED
ROAD C 657 LF/ 40 LF	= 17 LARGE TREES REQUIRED = 17 LARGE TREES PROVIDED
ROAD D 840 LF/ 40 LF	= 21 LARGE TREES REQUIRED = 21 LARGE TREES PROVIDED

NOTES:

ALL STREET TREES TO BE MAINTAINED BY HOMEOWNERS ASSOCIATION PER CITY LAND DEVELOPMENT CODE.

NOTE:

DO NOT PLANT STREET TREES AT THE COMMENCEMENT OF THE PROJECT. THE STREET TREES WILL BE PLANTED AS THE INDIVIDUAL LOTS ARE CONSTRUCTED. THESE PLANTINGS MAY BE DONE BY OTHERS. THE LOCATION OF STREET TREES ARE APPROXIMATE.

CONTRACTOR TO DETERMINE THE FINAL LOCATION OF STREET TREES AS INDIVIDUAL HOMES ARE CONSTRUCTED AND DRIVEWAY AND UTILITY LOCATIONS ARE KNOWN AND VERIFIED.

811 Know what's below. Call before you dig. Dial 811 Or Call 800-282-7411

60 0 30 60 120

SCALE: 1" = 60

NORTH

CLIENT:

HANSON WALTER & ASSOCIATES, INC.

8 BROADWAY #104
KISSIMMEE, FL 34741

PROJECT:

HARVEST GROVE TOWNHOMES

LOCATION:

1820, 1850 & 1860
PUFFIN ROAD
ST. CLOUD, FL

CONSULTANT:

NFC Landscape Architects
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Orlando, FL 32853-6433
(321) 388-4781

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2	06-09-2025

DESIGNED BY:	RJK
DRAWN BY:	RJK
CHECKED BY:	KAV
DATE:	03-07-2025

PROJECT NUMBER: 5557

SHEET TITLE:

STREET TREE CALCULATIONS AND STREET TREE PLAN

SHEET NUMBER:

ST101

Meeting: November 13, 2025

Agenda Item Type: Council Action CCA25-00008 COA24-00022 Appeal

Community Development Agenda Item:
Discussion and possible action regarding the review and determination on the applicant's appeal request for Project # COA24-00022, Historic Preservation Board approval with conditions, located at 1122 New York Avenue.

Strategic Key Focus Areas:
Diverse Innovative and Magnetic Economic Development

Background Information:
At the April 8, 2025, Historic Preservation Board meeting, the Certificate of Appropriateness application for exterior modifications at 1122 New York Avenue was reviewed and approved with the following conditions:
1. The existing stucco finish on the east elevation should be retained rather than replaced. Heavy textured stucco is historically appropriate and is documented from 1912 as the building's original construction. Existing stucco should be cleaned, repaired, and painted rather than replaced.
2. The proposed second-floor window replacement will require a staff review to verify final design and material selection.

The applicant originally requested to remove and replace the stucco on the east elevation with a sand-textured finish. However, the Secretary of the Interior Standards does not recommend removing stucco in its entirety or repairing with new stucco that is different in composition from historic stucco. It is always recommended first to repair and replace the damaged stucco and patch it with new material that duplicates the historic stucco in strength, composition, color, and texture.

The proposed sand-texture stucco finish is a modern application that would obscure a finish that has been in place, at least in part, for over 100 years. At the time of original construction, the current building existed as two separate but adjacent structures that were eventually stucco-ed over with the heavy-texture stucco to give the appearance of it being one cohesive building. There is a visible seam down the middle of the east elevation that shows where the two buildings were joined.

On August 26th, 2025, staff received a formal letter requesting Condition #1 be appealed, citing that there are deficiencies of the heavy trowel stucco, inconsistencies in the existing finish, and changing the stucco would better preserve the building. The applicant is requesting the following amendments be made to their Certificate of Appropriateness approval:
1. Removal of all existing stucco in order to expose and replace damaged framing and install a complete, continuous vapor barrier, felt paper, and stucco lath system.
2. Installation of raised trim bands with sand finish around all windows to protect vulnerable

transition points.
3. Application of sand finish stucco.

The applicant did note that they would be able to replicate the heavy trowel stucco, if it is deemed the appropriate texture for the building.

While the removal of the stucco is not ideal per the Standards, there are exceptions that would allow for the removal in order to maintain the overall integrity of the building. Staff would support the removal of the existing stucco and installation of the raised trim bands around the window; however, the texture must remain the heavy-textured stucco that currently exists.

Legal Authority:
Land Development Code Chapter 2, Article 7, Section 2.7.3.B

Budget and Recommendation:
There is no cost associated with this item.

Staff reviewed this request on or before September 12, 2025 and recommends APPROVAL with the following condition:
1. All the proposed work of the appeal may be completed (items #1 and #2) apart from the sand-finished stucco (item #3). The applicant be required to comply with the HPB Board approval and usage of the heavy textured stucco.

Finance Director's Comments:
N/A

Procurement Director's Comments:
N/A

City Manager's Comments:
City Manager recommends approval

City Council Action:
11/13/25 - Final Action

Attachments:
1. 1. CCA25-00008 COA24-00022 APPEAL Staff Memo11.13.25 CC
2. 2. COA24-00022 APPEAL REQUEST
3. 3. COA24-00022 1122 New York Avenue HPB Staff Report COMBINED
4. 4. COA24-00022 1122 New York Avenue Approval Letter

MEMORANDUM REPORT
FOR CITY COUNCIL – ON NOVEMBER 13, 2025

To: Mayor Robertson and City Council Members

From: Stephanie Streeter, Senior Planner

Thru: Melissa Dunklin, CPM, Community Development Director

Subject: Case No. CCA25-00008 – COA24-00022 Historic Preservation Appeal

Date: November 13, 2025

REQUEST: The applicant is requesting discussion and possible action on the appeal request for COA24-00022 Historic Preservation Board's approval with conditions.

BACKGROUND: At the April 8, 2025, Historic Preservation Board meeting, the Certificate of Appropriateness application for exterior modifications at 1122 New York Avenue was reviewed and approved with the following conditions:

1. The existing stucco finish on the east elevation should be retained rather than replaced. Heavy textured stucco is historically appropriate and is documented from 1912 as the building's original construction. Existing stucco should be cleaned, repaired, and painted rather than replaced.
2. The proposed second-floor window replacement will require a staff review to verify final design and material selection.

The applicant originally requested to remove and replace the stucco on the east elevation with a sand-textured finish. However, the Secretary of the Interior Standards does not recommend removing stucco in its entirety or repairing with new stucco that is different in composition from historic stucco. It is always recommended first to repair and replace the damaged stucco and patch it with new material that duplicates the historic stucco in strength, composition, color, and texture.

The proposed sand-texture stucco finish is a modern application that would obscure a finish that has been in place, at least in part, for over 100 years. At the time of original construction, the current building existed as two separate but adjacent structures that were eventually stucco-ed over with the heavy-texture stucco to give the appearance of it being one cohesive building. There is a visible seam down the middle of the east elevation that shows where the two buildings were joined.



1912 Photo of 1118-1122 New York Avenue

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1. Removal of all existing stucco in order to expose and replace damaged framing and install a complete, continuous vapor barrier, felt paper, and stucco lath system.
2. Installation of raised trim bands with sand finish around all windows to protect vulnerable transition points.
3. Application of sand finish stucco.

The applicant did note that they would be able to replicate the heavy trowel stucco, if it is deemed the appropriate texture for the building.

While the removal of the stucco is not ideal per the Standards, there are exceptions that would allow for the removal in order to maintain the overall integrity of the building. Staff would support the removal of the existing stucco and installation of the raised trim bands around the window; however, the texture must remain the heavy-textured stucco that currently exists.

STRATEGIC PLAN GOALS:

The proposed parking code revision meets the intent of the following City of St. Cloud Strategic Goal:

Diverse, Innovative, and Magnetic Economic Development: *To make the City a desirable business location; to increase the commercial tax base; and to invest in infrastructure to recruit industries.*

STAFF RECOMMENDATION:

Staff reviewed this request on or before September 12, 2025 and recommends **APPROVAL with the following condition**:

1. All the proposed work of the appeal may be completed apart from the sand-finished stucco. The finish must be the heavy-textured stucco once replaced.

Attachments: Appeal Letter
COA24-00022 Historic Preservation Board Staff Report and Approval Letter

WALL BROS
CONSTRUCTION & ROOFING

Wall.bros@yahoo.com 4156 Lippman Rd St. Cloud, FL 34772 407-557-6334

Patrick Wall
Owner & General Contractor

Date: August 26, 2025

To:
Honorable Members of the St. Cloud City Council
St. Cloud, FL

Re: Formal Appeal of Historic Preservation Board Decision – Certificate of Appropriateness for 1122 New York Avenue

Dear Council Members,

Pursuant to the authority vested in the St. Cloud City Council to review and reconsider decisions of the Historic Preservation Board, I, Patrick Wall, General Contractor and owner of Wall Bros Construction, LLC, respectfully submit this appeal of the April 9, 2025 decision granting a Certificate of Appropriateness for 1122 New York Avenue *"WITH CONDITIONS."*

Specifically, this appeal challenges the Board's first stated condition, namely: *"to repair and maintain the existing heavy trowel stucco on the East elevation."*

After extensive professional evaluation of the building and based on established principles of construction science and preservation practice, it is our expert determination that compliance with this condition would not preserve, but rather endanger, the building's long-term integrity.

Grounds for Appeal

1. Hidden Structural Compromise

The heavy trowel stucco currently in place exhibits visible decay. From a

construction standpoint, this is a clear indicator of moisture intrusion. It is a well-documented fact that seemingly intact stucco often conceals deteriorated framing. Because this damage is "unforeseen" until full removal, any partial or surface-level repair would leave compromised framing in place, thereby perpetuating decay and undermining the structure. Full removal is the only method that ensures all damaged framing can be identified and replaced.

2. Inherent Deficiencies of Heavy Trowel Stucco

Heavy trowel stucco is, by design, prone to water entrapment. The ridges create horizontal pockets that accumulate and hold moisture, accelerating failure. These ridges are thicker than the base layers, resulting in irregular stucco thickness and uneven performance. By contrast, sand finish stucco provides a fully vertical surface, shedding water completely and offering proven longevity. From both a scientific and preservation standpoint, sand finish is the superior system.

3. Preservation of the Building Envelope

The fundamental principle of preservation is protecting the building envelope. Retaining compromised stucco prevents the installation of a modern, continuous thermal building wrap. Only with complete removal can a new vapor barrier, felt paper, and lath system be properly installed. These elements are indispensable to securing the structure against moisture intrusion. The existing lath, already rusting in multiple locations, cannot be relied upon. Left in place, its inevitable failure will result in stucco delamination.

4. Inconsistencies in Existing Finish

The building currently demonstrates not one, but **over eight distinct stucco patterns** across its elevations, with two different heavy trowel styles visible even on the East wall alone. This demonstrates that the existing stucco is not original to the structure and has already undergone inconsistent modifications over time. Allowing further piecemeal repair would only increase this inconsistency, whereas full replacement would provide uniformity and a more authentic preservation outcome.

5. Vulnerability of Window Transitions
The Board's conditions do not address the proposed addition of raised trim bands at window openings. Currently, the absence of trim bands leaves multiple water entry points where stucco meets window frames. Raised trim bands ensure consistent stucco thickness and correct water shedding away from the openings, which is critical for preventing intrusion at these vulnerable junctures.

Proposed Preservation Solution

In light of the above, and in the interest of true preservation, we respectfully submit the following as the correct course of action:

1. **Removal of all existing stucco** in order to expose and replace damaged framing and install a complete, continuous vapor barrier, felt paper, and stucco lath system.
2. **Installation of raised trim bands** with sand finish around all windows to protect vulnerable transition points.
3. **Application of sand finish stucco** as the superior, water-shedding option. Should the City deem heavy trowel stucco historically necessary, Wall Bros Construction has the expertise to replicate and match any selected system in a historically respectful manner.

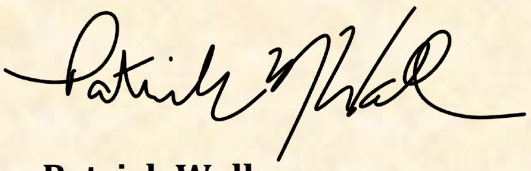
Conclusion

The Historic Preservation Board's condition, while well-intentioned, is not consistent with sound preservation practice. It risks concealing ongoing structural decay, perpetuating deficiencies inherent in heavy trowel stucco, and leaving the building vulnerable to further deterioration. By contrast, our proposed approach ensures both fidelity to historic character and the structural protection necessary to safeguard this property for the next century.

For these reasons, we respectfully request that the City Council reverse or amend the Board's decision and authorize complete stucco replacement with the above-detailed improvements.

Thank you for your careful consideration of this appeal. We stand ready to answer any further technical questions the Council may have.

Respectfully submitted,



Patrick Wall
General Contractor | Owner
Wall Bros Construction, LLC

Historic Preservation Board Staff Report

Meeting Date: April 8, 2025

Case No.
COA24-00022

Type of Application
Certificate of Appropriateness – Major

Request
Exterior façade modifications

Case Name
1122 New York Avenue

Applicant/Agent
St. Cloud Lodge No. 66 I.O.O.F / Wall Bros Construction

Address/Location
1118-1124 New York Avenue

Parcel ID #
01-26-30-0001-0188-0070

Project Manager
Stephanie Streeter, Senior Planner



Figure 1 – Aerial Map

Request

The applicant is requesting approval from the Historic Preservation Board for a Certificate of Appropriateness (COA) to modify the east and south exterior facades. The property is located at 1118 New York Avenue as shown in **Figure 1** above.

Scope of Work

Exterior modifications such as replacement of 2nd story windows, removal and repair of stucco, modifications to existing openings, and other exterior modifications as described in **Exhibit A**.

Background

The structure is located within the Central Business District 1 (CBD-1) zoning district and within the boundaries of the City's Historic Preservation District. The building is contributing to the local historic district as reflected in the 2020 survey and inventory and the National Register District. The structure was built in 1915. The proposed modifications meet the Secretary of the Interior's Standards by maintaining the building's integrity and preserving historic materials. The approval for the removal and repair of the stucco is the only scope that should be conditioned as the heavy textured stucco is original to the building. The structure is reflected in **Figure 2** below.



Figure 2 – 1118-1124 New York Avenue (East Elevation)

Findings

Staff has reviewed the Certificate of Appropriateness application against the Secretary of Interior's Standards for Rehabilitation within Section 3.13.1.H of the Land Development Code. The bold standards are listed below and staff's comments follow in *italics*:

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site environment.

Currently, there is no new use being proposed at this location. The existing use shall remain as a multi-tenant retail and club / lodge.

2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

The proposed alterations retain the historic character of the structure and are visually compatible with the architectural style of the property and the district. Specifically, the removal and reinstallation of the canopy is appropriate and ensures that this feature remains in place after painting is complete; the replacement of

the eight second-floor aluminum windows is appropriate as the original window openings, paired window groupings, and mullion separations remain consistent with the building's historic design; and the existing ground-floor storefronts are retained, which is appropriate.

The proposed modifications to the ground-floor doors to create uniform opening sizes and transom windows are appropriate. The existing right-side door is too high and presents a safety hazard when entering and exiting. Lowering the door opening to match the left-side door improves safety while maintaining the historic storefront configuration. The extension of the concrete slab to align with the modified doorway is appropriate as it does not detract from the building's historic character and will improve accessibility.

However, the replacement of the existing stucco is not recommended. The existing heavy textured stucco is historically appropriate and is documented in a 1912 photograph as part of the building's original construction. The proposed sand-textured finish is a modern application that would obscure a finish that has been in place, at least in part, for over 100 years. The existing stucco should be cleaned, repaired, and painted rather than replaced on the east elevation. The sand-textured on the south elevation is recommended.

3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.

The proposed alterations do not introduce conjectural features or create a false sense of historical development.

4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.

No known changes to the property have acquired their own historic significance.

5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.

The proposed scope of work includes replacement of the existing stucco on the east elevation and adding stucco on the south elevation. The introduction of the sand-finished stucco on east elevation would remove distinctive finishes that characterize this property. It is recommended that the heavy-textured stucco shall remain on the east elevation while the sand-finished stucco is recommended for the south elevation.

6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

Apart from the stucco, the scope of work does not replace distinctive features of the buildings. The replacement of the windows is appropriate as it shall match the old in design, color, and texture and will not change the existing dimensions. Staff will review the final window material and designs at the time of the building permit to ensure compliance.

7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

No chemical or physical treatments are being proposed at this time.

8. Significant archaeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

No significant archaeological resources have been noted at this site.

9. New additions, exterior alterations, or related new construction on the same parcel of land shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

The proposed changes to the south elevation are compatible with the massing, size, scale, and architectural features. The proposed changes to the east elevation are compatible with the exception of the sand-finished stucco, which staff has added conditions to ensure the retention of the heavy-texture that would characterize the property. The south elevation may have the sand-textured stucco in an effort to differentiate the old from the new.

10. New additions or related new construction on a parcel of land adjacent to a historic property shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

The proposed scope of work does not affect neighboring historic properties.



1118 New York Avenue - Storefronts

Additional criteria

1. *New construction and alterations.* All new construction and alterations to existing buildings within a designated historic district or on an individually designated property shall be visually compatible, and meet the following guidelines, as determined by the HPB.

Staff finds that the proposed alterations meet the following additional criteria:

i. *Design Styles.* New Buildings should take their design cues from the prevailing architectural styles within the historic district. Traditional or contemporary design standards and elements should relate to the existing styles.

ii. *Proportions of Openings.* The openings of the building are visually compatible with the openings of existing contributing buildings.

iii. *Rhythm of Solids to Voids.* The relationship between solids and voids is visually compatible with the buildings at street level.

iv. *Relationship of Materials and Textures.* The proposed materials and textures are in line with other materials used within the historic district – with conditions.

v. *Size, scale, bulk, mass, and volume.* The physical size, scale, bulk, mass, and volume should be compatible with the existing contributing buildings within the historic district at street level, and where appropriate may be stepped back above 35 feet in building height.



1118 New York Avenue – South Elevation

This is a quasi-judicial matter and, as such, requires disclosure of all ex-parte communications, investigations, site visits and expert opinions regarding this matter.

Staff Recommendation

Staff is recommending **APPROVAL** of the proposed scope of work with the following conditions:

1. The existing stucco finish on the east elevation should be retained rather than replaced. Heavy textured stucco is historically appropriate and is documented from 1912 as the building's original construction. Existing stucco should be cleaned, repaired, and painted rather than replaced.
2. The proposed second-floor window replacement will require a staff review to verify final design and material selections.

The recommendation for **Approval** is based on a finding that the proposed alteration is consistent with the purpose and intent of *Ordinance No. 2024-47, City of St. Cloud Land Development Code, Article III, Division 24, Historic Preservation Overlay (HPO) District, Section 3.24.8*, and complies with the requirements outlined in Ordinance No. 2024-47, as outlined in the staff report.

Attachments

Exhibit A: Scope of Work and Supporting Documents

Wall Bros Construction

Cover Page

Oddfellows 1122 New York Av

Project: "Refurbished Building Façade"

HISTORICAL SOCIETY

SUBMITTAL PACKAGE

The building owner, (Oddfellows Organization, contact Bill Campbell 321-624-0951) is ready to move forward with a renovation of the building exterior. Please see the attached " Proposed Scope of Work"

The building has 2 tenants, an ice cream shop on the left (1124 New York Ave) and an antique/collectables shop on the right (1118 New York Ave), all on the first floor.

The second floor houses the Oddfellows Organization Lodge and meeting place (1122 New York Ave) Access is through a door on the ground floor between the two shops, and then up the stairs.

Wall Bros Const.

Oddfellows 1122 New York Av

Proposed Scope of Work East Elevation:

1. Remove the existing canopy for re-use. Store and reinstall after painting.

2. Remove and replace the existing stucco, along the east elevation (bldg. front facing the street) This stucco is already in partial decay and failure. The existing stucco is miss-matched in texture from left side to the right, also prompting replacement. The new stucco will be a uniform "sand finish" throughout. The new stucco will include ¾ X 4 " wide trim bands around the second floor windows. The new stucco will also have a simulated column bump out (3/4") at the south/east and the south/ west corner of the bldg. Extending 6" each way from the ground to the roof. (see attached sketch: Proposed Renovations) the new stucco will be painted complete throughout.

3. Remove and replace the existing 2nd floor windows (8 each) along the east elevation (building front, facing street) The existing windows are outdated and leaking air and moisture into the building. The existing window frames are aluminum. Two windows are "paired" at each of the four openings and separated by a six inch aluminum mullion. The new Windows will be; Low E, tinted and code compliant. New window submittals will be provided for review and approval.

4. The ground floor businesses have existing matching wooden storefronts with wooden walls trim and window glass. Each of the existing wood storefronts are in excellent shape and will remain. They will be washed clean and painted complete. Color samples will be provided for approval.

5. Between the storefronts on the ground floor are two existing doors. These existing doors are in mismatch as to size, opening and transom window. The door on the left (A) accesses a storeroom. This existing 6'-8", 3'-0 wood door has a 16 inch wood frame transom window above it. The overall opening size is 41 by 112 inches. The door (B) on the right is the aforementioned access to the second floor. The opening size of B's doorway is noticeably higher (6 inches) than the door A on the left. Please see existing photos and existing condition sketch. The intent of the work here is to have door B match that of door A in opening size, and transom window. The existing door system A on the left. The existing opening will be lowered to match door A. The existing concrete step slab on the left door A, will be extended to the right under the new opening on the right to match. The floor and framing inside the door B will be lowered to match the new opening height. One step will be added to the stairway inside to accommodate.

This concludes the proposed work for the East Elevation

Proposed Scope of Work at South Elevation

The owner reserves the decision to delete or postpone any scope of work here not included in current funding.

The South elevation is the left side of the building, facing the existing parking area. This exterior wall has an existing finish of corrugated painted metal siding. There is an existing, semi new, wall mounted air conditioning system to remain. Several surface mounted conduit for HVAC power and condensate also exist and will remain.

There is an adjacent building constructed approximately 2 foot away from the South elevation exterior wall this creates a non workable area and will remain as is. (see photo)

1. Remove and replace 2nd floor windows (4 each) along the South elevation. The existing windows are outdated, and leaking air and moisture into the building. The existing window frames are aluminum. The new Windows will be low E, tinted and code compliant. New frames are to have a wood grain texture. New window submittals will be provided for review and approval.

2. Install new stucco throughout. The stucco will be a uniform sand finish matching the new stucco along the east elevation. The stucco will include a three quarter inch by 4 inch wide trim band around the windows, around the AC equipment and the portion of the wall at the inaccessible area by the adjacent building. Stucco will also include the simulated column on the southeast corner of the building attached to the east elevation. The new stucco is to be painted complete throughout. Paint color samples will be provided for review and approval.

3. Remove the unused window AC unit. Prepare opening for new window.

4. Remove the existing window directly behind the adjacent building's gable peak. This window is obscured by the adjacent building, and unusable. This opening is to be infill framed, sheeted and finished to match the surrounding wall.

5. Remove the existing signage and frame along the South elevation adjacent to the southwest corner.

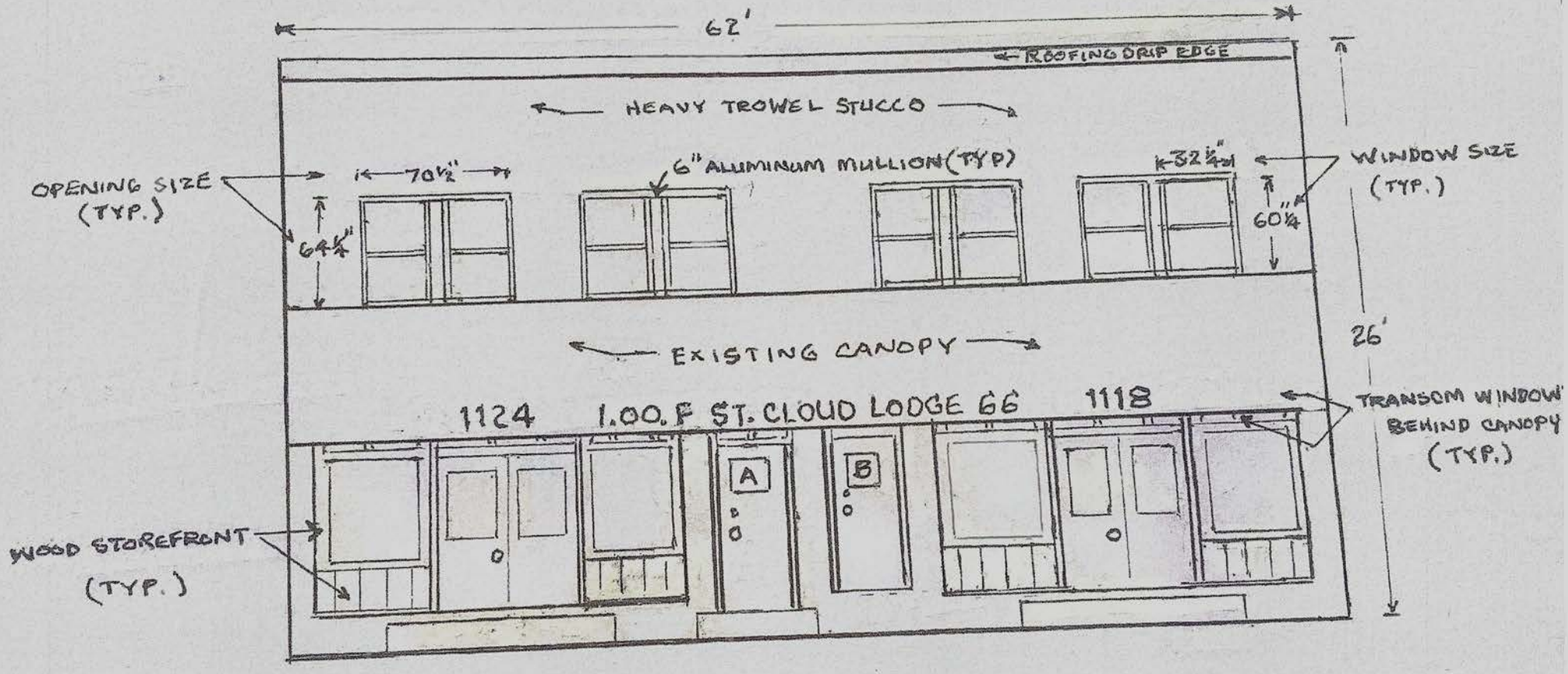
6. Construct new 2 foot by 6 foot wood framed awning over the AC equipment to remain. Sheet with metal panels. Paint complete

This concludes the scope of work for the South Elevation.

WALL BROS CONST

ODDFELLOWS 1122 NEW YORK AV.

EXISTING CONDITIONS



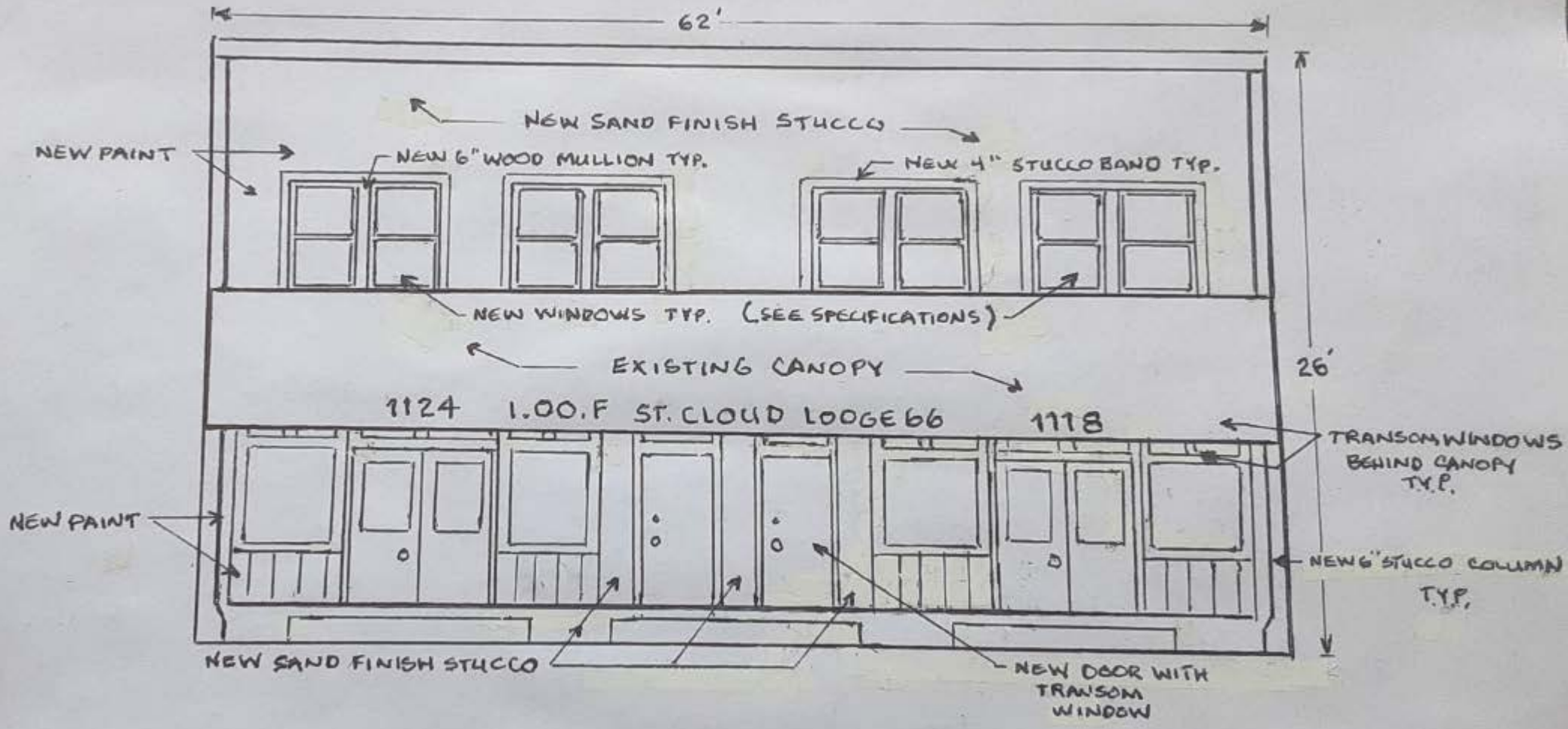
EAST ELEVATION (FIELD SKETCH)

N.T.S.

WALL BROS CONST

ODDFELLOWS 1122 NEW YORK

PROPOSED RENOVATION



EAST ELEVATION (FIELD SKETCH)

N.T.S.

Product Approval
USER: Public User

Search Criteria

Refine Se

Code Version	2023	FL#	22513.6
Application Type	ALL	Product Manufacturer	ALL
Category	ALL	Subcategory	ALL
Application Status	ALL	Compliance Method	ALL
Quality Assurance Entity	ALL	Quality Assurance Entity Contract Expired	ALL
Product Model, Number or Name	ALL	Product Description	ALL
Approved for use in HVHZ	ALL	Approved for use outside HVHZ	ALL
Impact Resistant	ALL	Design Pressure	ALL
Other	ALL		

Search Results - Applications

FL#	Type	Manufacturer	Validated By	Status
FL22513-R4 History	Revision	Masonite International **FL#:** FL22513.6 **Model:** Wood-edge Steel Side-Hinged Door Unit **Description:** 6'-8" Opaque I/S or O/S Single Door **Category:** Exterior Doors **Subcategory:** Swinging Exterior Door Assemblies	National Accreditation & Management Institute (804) 684-5124	Approv *

*Approved by DBPR. Approvals by DBPR shall be reviewed and ratified by the POC and/or the Commission if necessary.

Product Approval
USER: Public User

Search Criteria

Refine Search

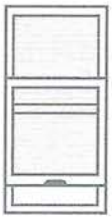
Code Version	2023	FL#	14039
Application Type	ALL	Product Manufacturer	ALL
Category	ALL	Subcategory	ALL
Application Status	ALL	Compliance Method	ALL
Quality Assurance Entity	ALL	Quality Assurance Entity Contract Expired	ALL
Product Model, Number or Name	ALL	Product Description	ALL
Approved for use in HVHZ	ALL	Approved for use outside HVHZ	ALL
Impact Resistant	ALL	Design Pressure	ALL
Other	ALL		

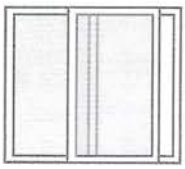
Search Results - Applications

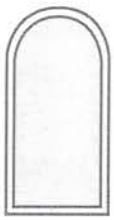
FL#	Type	Manufacturer	Validated By	Status
FL14039-R9 History	Affirmation	Ply Gem Windows **Category:** Windows **Subcategory:** Single Hung	National Accreditation & Management Institute (804) 684-5124	Approved

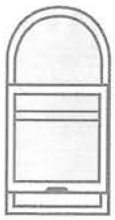
*Approved by DBPR. Approvals by DBPR shall be reviewed and ratified by the POC and/or the Commission if necessary.

Styles

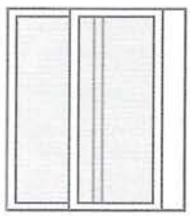

Single Hung


Sliding Window


Architectural Shapes


Operating Arch Single Hung


Picture Fixed


Sliding Patio Door *(Available in 400 Series only)*

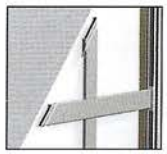
Colors


White


Bronze

Grille Options

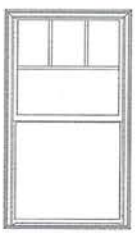

5/8" Flat Grilles Between Glass

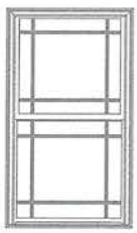

3/4" Flat Grilles Between Glass

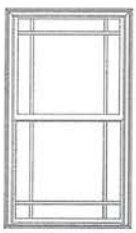
Grille Patterns


Colonial

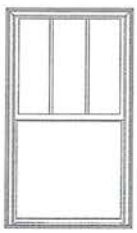

Half Colonial


Plaza

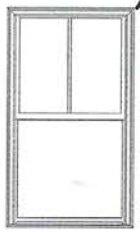

Prairie


Perimeter Prairie


Three over Three


Three over One


Two over Two


Two over One

Glass/Energy Efficiency

HP^{SC} High Performance Solar Cooling HP^{SC} features specialty Low-E^{SC} glass coupled with Argon gas sealed between the glass panes for increased insulation against temperature transfer. It deflects the sun's heat and can greatly reduce solar heat gain, fade damage and cooling costs in warmer regions.

HP High performance glass package with Low-E glass and Argon gas sealed between the glass panes provides increased energy efficiency in any climate, along with solar fade protection.

Low-E^{SC} For homes in warmer regions, Low-E^{SC} glass deflects the sun's heat to reduce solar heat gain, fade damage and cooling costs.

Impact Impact glass protects against windborne debris in extreme weather. In addition, it provides added security against break-ins and reduces outside noise. Available in 410 Series only.

Performance	310	410
Design Pressure (DP) Rating	35	50
Texas Dept. of Insurance (TDI) Evaluation	WIN435	WIN1396, DR473 & DR621
Meets Florida Building Code	–	FL14039.1, FL14634 & FL15943

Ply Gem®
WINDOWS & DOORS

As the #1 Manufacturer of Windows in North America, Ply Gem understands the window and door needs of today's homeowners. Ply Gem aluminum windows are durable, energy efficient, and require only minimal maintenance. Get the styles and performance options you need with Ply Gem windows and patio doors at The Home Depot.





300 Aluminum Window

Dependable value and performance.



400 Aluminum Window

Value and performance in a narrower frame for a larger viewing area.

Features

- Dual lift rails on the sash for easy opening and closing
- Bottom sash is removable to make cleaning easier
- Sturdy 2 7/16" frame depth with nailing fin to simplify installation
- Reduced environmental impact - made with 75% recycled material
- Insulated glass and Warm Edge spacers save energy
- Weather resistant with a sloped sill that drains water away from the window
- Meets Texas Dept. of Insurance (TDI)

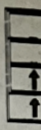
36 X 62
Aluminum
410 White



410FL

Single Hung Aluminum Window with Flange

ventana de guillotina con aleta a ras



Side–loading removable bottom sash

fajin removable con instalacion lateral

New Construction

CONSTRUCCION NUEVA

MODEL
Modelo

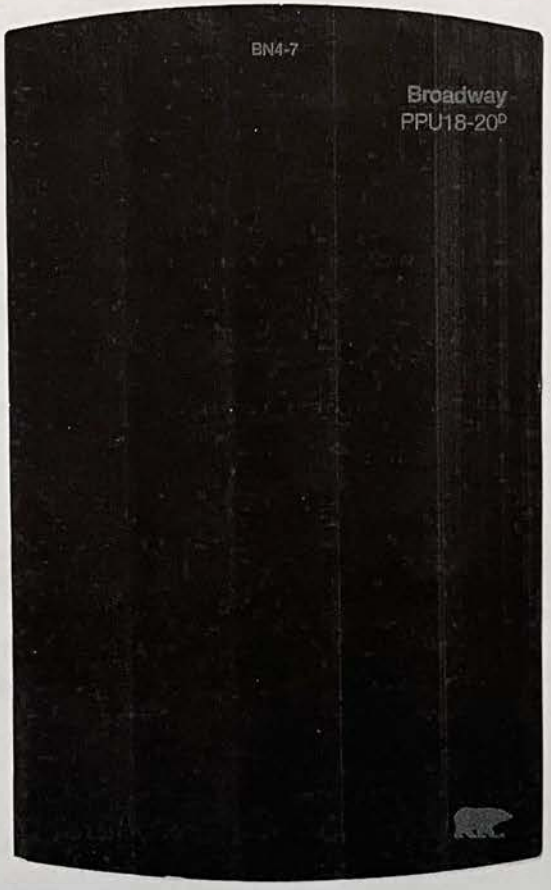
FL25

UNIT DIMENSION WIDTH X HEIGHT Dimensiones de la unidad Ancho x Alto	36 x 62
ROUGH OPENING Abertura sin acabado	
FRAME TYPE/Depth Tipo de marco/Profundidad	FLANGE 2 7/16 aleta a ras de 2 7/24
GRILLES Rejillas	YES si
COLOR Color	WHITE BLANCO
HARDWARE Herraje	INCLUDED INCLUIDO
INSECT SCREEN Mosquitera	HALF INCLUDED MOSQUITERA MEDIA
GLASS TYPE Vidrio tipo de	LOW-E BAJA EMISIÓN
WARRANTY Garantia	20 YEAR GLASS 20 AÑOS EN VIDRIO

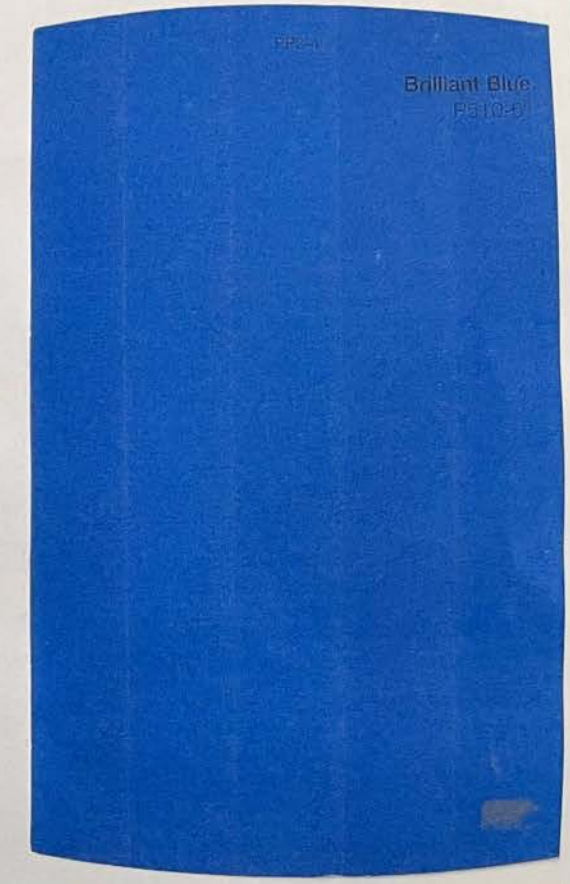
SKU#: 710195



Body Paint –
To match existing



To Remain BLACK –
Columns, Storefront
windows



2 Downstairs
Doors (match to
awning)


CLASSIC TREATS
SUNDAES FLOATS CARAMEL APPLES
Summer Hours
Tues-Sat
12-8pm
Sorry We're CLOSED
SODA FOUNTAIN
Sweet Spot
SNOBALLS
@SWEETSPOTSNOBALLS
22


1118
OPEN
CLOUD 9
MARKETPLACE
SHOP & SIP
THE BLACK SQUIRREL BOOKSTORE
Sorry we're
CLOSED
Coors
LIGHT


1124
I.O O.F ST.CLOUD LODGE 66
1118
CLASSIC TREATS
SUNDAES FLOATS CARAMEL APPLE
Sweet Spot
@SWEETSPOTS
1122
CLOSED

ST. CLOUD
LODGE
66
08-3475
OSCEOLA
LEA
15
08-3475
DEBOR
REBEKAH
LODGE
82
08-3475
The
New York
Artist Shop
Custom
Framing
08-3475
GMC

1124

CLASSIC TREATS

SUNDAES FLOATS CARAMEL APPLES

Summer Hours
Tues-Sat
12-8pm

Come In
We're
OPEN

SODA FOUNTAIN
Sweet Spot
SNOBALLS

@SWEETSPOTSNOBALLS

fluff

COLD TREATS INSIDE
SOFT, FLUFFY SNOBALLS
SUNDAES


1118
OPEN
CLOUD 9
MARKETPLACE
SHOP & SIP
Come in we're
OPEN
BUSINESS HOURS
MONDAY 10 –
TUESDAY 10 –
WEDNESDAY 10 –
THURSDAY 10 – 6 PM
FRIDAY 10 – 7 PM
SATURDAY 10 – 7 PM
SUNDAY 10 –
THE BLACK SQUIRREL BOOKSTORE
Come in we're
OPEN
BUSINESS HOURS
MONDAY 10 –
TUESDAY 10 –
WEDNESDAY 10 –
THURSDAY 10 – 6 PM
FRIDAY 10 – 7 PM
SATURDAY 10 – 11 PM
SUNDAY 10 –
IT'S
TOO LATE
COLD BEER
Wine

St. Cloud FLORIDA
Your Centerplace for Life
www.stcloud.org

COMMUNITY DEVELOPMENT

Melissa Dunklin, CPM
Community Development Director

Dagmarie Segarra
Community Development Deputy Director

Tisha Manning
Zoning Manager

April 9, 2025

Patrick Wall
Wall Bros Construction, LLC
4156 Lippman Road
St. Cloud, FL 34772

RE: 1122 New York Avenue
Certificate of Appropriateness - Major
Case # COA24-00022

Dear Mr. Wall:

Your application for a Certificate of Appropriateness was reviewed by the Historic Preservation board on April 8, 2025 and the scope of work was approved with the following conditions:

- The existing stucco finish on the east elevation should be retained rather than replaced. Heavy textured stucco is historically appropriate and is documented from 1912 as the building's original construction. Existing stucco should be cleaned, repaired, and painted rather than replaced
- The proposed second-floor window replacement will require staff review to verify final design and material selections

This Certificate of Appropriateness has been issued because the proposed work meets the requirements of the City's Historic Preservation Ordinance. The issuance of this Certificate of Appropriateness does not constitute or guarantee the issuance of a building permit.

Any changes to the approved work must be approved by Community Development before starting or continuing with construction.

If you have additional questions regarding this Certificate of Appropriateness, please contact Stephanie Streeter at 407-957-7142 or stephanie.streeter@stcloudfl.gov

Sincerely,

Stephanie Streeter

Stephanie Streeter
Senior Planner

City of St. Cloud

FY26 Warrant List #01

10/01/2025 to 10/31/2025

Date	Check Number / Vendor Name/ Project	Transaction Description	Amount
9/30/2025	22039 BIG DOG EXPRESS OF SOUTH FL INC		7,410.00
		VEGETATIVE WASTE DISPOSAL SEP25	
		VEGETATIVE WASTE DISPOSAL AUG25	
9/30/2025	22040 CARROT TOP INDUSTRIES		0.00
		BACKDROP/CUSTOM SIGN ACCT CLOSED REISSUE EFT 22040	
		CR APPLD CS264390 REISSUE EFT 22015	
		FLAG HOLDER BELT FOR REISSUE EFT 22015	
		BACKDROP/CUSTOM SIGNAGE REISSUE EFT 22015	
		SHIPPING REISSUE EFT 22015	
		CR APPLD CS264390 ACCT CLOSED REISSUE EFT 22040	
		FLAG HOLDER BELT/ ACCT CLOSED REISSUE EFT 22040	
		SHIPPING /ACCT CLOSED REISSUE EFT 22040	
9/30/2025	22041 CHAPCO FENCE, LLC		615.00
		TEMP FENCING FOR SPLASH PAD OUT OF SERVICE	
9/30/2025	22042 CIVITAS LLC		3,666.30
		ENVIROMENTAL REVIEW AUG25	
		ENVIROMENTAL REVIEW JUN25	
		HUD TA HRS AUG25	
9/30/2025	22043 COMMERCIAL ENERGY SPECIALISTS, LLC		340.00
		GENERAL SERVICE CALL POOL FILTER PUMP FAILURE	
9/30/2025	22044 DUVAL FORD, LLC		30,705.00
		UNIT 6-27 PUBLIC WORKS	
9/30/2025	22045 GAME OFFICIALS, INC.		765.00
		ADULT BASKETBALL 09/08/25-09/22/25	
9/30/2025	22046 HABITAT FOR HUMANITY GREATER		8,172.49
		ROOF REPLACEMENT SEP25	
		ROOF REPLACEMENT JUL25	
		ROOF REPLACEMENT AUG25	
9/30/2025	22047 HANSON, WALTER & ASSOCIATES INC.		57,200.00
	ST2306 CREEK WOODS DR EXTENSION	SERVICES THRU 8/31/25	
	ST2306 CREEK WOODS DR EXTENSION	SERVICES THRU 7/31/25 COSC CREEK WOODS DR EXT	

City of St. Cloud

FY26 Warrant List #01

10/01/2025 to 10/31/2025

Date	Check Number / Vendor Name/ Project	Transaction Description	Amount
9/30/2025	22048 JOE'S AUTO SERVICE CENTER, INC.		125.00
		CASE #25-004587	
9/30/2025	22049 JOHNS EASTERN COMPANY, INC.		5,487.00
		CLAIMS HANDLING 2ND QTR 10/01/25-12/31/25	
9/30/2025	22050 LYNCH OIL		2,146.49
		FUEL DELIVERY 9/12/25	
		FUEL DELIVERY 9/16/25	
		FUEL DELIVERY 9/19/25	
		FUEL DELIVERY 9/23/25	
9/30/2025	22051 MCCI, LLC		28,555.37
		LASEREFICHE LICENSE RENEW 10/2/25-10/1/26	
9/30/2025	22052 MERMAID AQUATICS, LLC		787.50
	PRC026 MERMAID AQUATICS	RED CROSS CLASS SEP25	
9/30/2025	22053 NAFECO, INC.		856.15
		SOCKS R.WISE	
		NAMEBAR MYLES	
		RAIN SHELL F.COLON	
		PANT C.DEAN	
		GLOVE R.RAMIREZ	
		SHIRTS R.ENNIS	
		CREDIT MEMO PO 084256	
		PANTS H PEREZ	
		PANT J.HYLANDER	
9/30/2025	22054 OSCEOLA ENGINEERING, INC.		4,802.50
	PR2106 17TH STREET BALLFIELDS	SRVC CONSULTANT AUG25 21-036 17TH ST BALLFIELD	
	SW2005 ESPIRIT STMWTR POND IMPR	SERVICE CONSULTANT JUN25 22-018 ESPIRIT POND	
	SW2005 ESPIRIT STMWTR POND IMPR	SERVICE CONSULTANT AUG25 22-018 ESPIRIT POND	
9/30/2025	22055 PETROLEUM TRADERS CORP.		22,188.86
		ULTRA LOW #2 FUEL PO NUM 085089	
9/30/2025	22057 PRECISION ROOFING SOLUTIONS, INC.		4,740.00

Date	Check Number / Vendor Name/ Project	Transaction Description	Amount
		ROOF REPAIRS AT 4315 RUMMELL ROAD	
9/30/2025	22058 SCHOOL DISTRICT OF OSCEOLA COUNTY		2,700.00
		CITATION FEES DUE TO SDOC WEEK ENDING (09/26/2025)	
9/30/2025	22059 STANDARD INSURANCE COMPANY		17,730.50
		SEPTEMBER 2025 PREMIUM VOLUNTARY LIFE INSURANCE	
		SEPTEMBER 2025 PREMIUM LONG TERM DISABILITY	
		SEPTEMBER 2025 PREMIUM CITY PAID LIFE INSURANCE	
9/30/2025	22061 WASTE CONNECTIONS OF OSCEOLA COUNTY		45,086.78
		MSW DISPOSAL 9/15/25 - 9/20/25	
		TIRE DISPOSAL - VEHICLE 8/21/25	
		TIRE DISPOSAL - VEHICLE 9/17/25	
9/30/2025	22062 WORLD ELECTRIC SUPPLY, INC.		25.98
		REPAIRS AT IT SERVER ROOM	
9/30/2025	22063 YOUR EVENTS BY L&L LLC		1,685.00
	PRC024 YOUR EVENTS BY L&L	THE RANCH ST CLOUD SRVCS 7/1/25 - 7/31/25	
	PRC024 YOUR EVENTS BY L&L	THE RANCH ST CLOUD SRVCS 8/1/25 - 8/31/25	
9/30/2025	300686 ACCESS SOLUTIONS CORP.		4,917.18
		SUPPLY EXIT DEVICES.	
		DO NOT DUPLICATE FOR PD. KEY REPLACEMENT	
		REPAIRS AT PEGHORN. RE-KEY	
9/30/2025	300687 APEC LLC		16,225.00
	PR2502 LAKEFRONT PATHWAY IMPROVE	ASPHALT REPAIR LAKEFRONT	
9/30/2025	300688 BAKER DISTRIBUTING COMPANY LLC		914.10
		A/C SERVICES / REPAIRS AT JUF	
9/30/2025	300689 BATTERIES PLUS		329.90
		LIGHT REPAIRS AT SHUFFLEBOARD COURTS	
9/30/2025	300690 BRADY INDUSTRIES OF FLORIDA, LLC		1,958.00
		SUPPLIES-CRABBY BILL'S	

Date	Check Number / Vendor Name/ Project	Transaction Description	Amount
9/30/2025	300691 BRANDON SNOW		45.00
		INVESTIGATION PURPOSES 1/1/26-12/31/26	
9/30/2025	300692 BULK EXPRESS TRANSPORT, LLC		3,358.53
		SUPPLEMENTAL HAULING	
		SUPPLEMENTAL HAULING	
9/30/2025	300693 CARRIER ENTERPRISE, LLC		8,287.24
		A/C FILTERS FOR SERVICES	
		FILTERS FOR A/C SERVICES.	
9/30/2025	300694 MISC CUSTOMER REFUNDS		250.00
		REFUND OF DEPOSIT CANNERY PARK BUILDING	
9/30/2025	300695 DAVID MORGAN		29.50
		DAVID MORGAN,IMSA TRAFFIC SIGNAL, T25250, 102	
9/30/2025	300696 ERICA MCKINNON		34.02
		E.MCKINNON 2025 IACA CONF MILES T25280 103	
9/30/2025	300697 MISC CUSTOMER REFUNDS		500.00
		REFUND OF DEPOSIT COMM CENTER CYPRESS ROOM	
9/30/2025	300698 FIVE9, INC.		1,345.00
		SERVICE 8/27/25-9/26/25	
9/30/2025	300699 FLACARSHOWS.COM		117.00
	PRE007 4TH OF JULY CELEBRATION	EVENT SIDEBAR BANNER- 6/6/25-7/4/25	
9/30/2025	300702 GENUINE PARTS COMPANY		151,491.66
		AUGUST 2025 FLEET PARTS AND PERSONNEL EXPENSE	
		AUGUST 2025 FLEET PARTS AND PERSONNEL EXPENSE	
		AUGUST 2025 FLEET PARTS AND PERSONNEL EXPENSE	
		AUGUST 2025 FLEET PARTS AND PERSONNEL EXPENSE	
		AUGUST 2025 FLEET PARTS AND PERSONNEL EXPENSE	
		AUGUST 2025 FLEET PARTS AND PERSONNEL EXPENSE	
		AUGUST 2025 FLEET PARTS AND PERSONNEL EXPENSE	
		AUGUST 2025 FLEET PARTS AND PERSONNEL EXPENSE	

Date	Check Number / Vendor Name/ Project	Transaction Description	Amount
		AUGUST 2025 FLEET PARTS AND PERSONNEL EXPENSE	
		AUGUST 2025 FLEET PARTS AND PERSONNEL EXPENSE	
		AUGUST 2025 FLEET PARTS AND PERSONNEL EXPENSE	
		AUGUST 2025 FLEET PARTS AND PERSONNEL EXPENSE	
		AUGUST 2025 FLEET PARTS AND PERSONNEL EXPENSE	
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		AUGUST 2025 FLEET PARTS AND PERSONNEL EXPENSE	
		AUGUST 2025 FLEET PARTS AND PERSONNEL EXPENSE	
		AUGUST 2025 FLEET PARTS AND PERSONNEL EXPENSE	
9/30/2025	300703 GLOBALSTAR USA LLC		2,538.53
		SERVICE 8/21/25-8/20/26 SATELLITE CELLULAR	
9/30/2025	300704 GOLF VENTURES, INC.		756.38
		FREIGHT	
		PESTICIDES	
9/30/2025	300705 GREENSCAPE MOWING, INC.		3,450.00
		LANDFILL MOWING SEP25	
9/30/2025	300706 INTERIOR CONTRACT SERVICES,INC.		8,048.00
		HUMAN RESOURCES OFFICES	
		HUMAN RESOURCES OFFICES	
		HUMAN RESOURCES OFFICES	
		HUMAN RESOURCES OFFICES	
9/30/2025	300707 JORDAN HALLETT		63.90
		JORDAN HALLETT, NRPA CONF T25280, 103	
9/30/2025	300708 KELLY L. LACOE		23.88
		K.LACOE CENTRAL FL GIS WRKSHP T25212 102	
9/30/2025	300713 KELVIN SOTO, ESQ.		2,322.00
		RECORDING FEES FOR CODE COMPLIANCE	
		RECORDING FEES FOR CODE COMPLIANCE	

Date	Check Number / Vendor Name/ Project	Transaction Description	Amount
		RECORDING FEES FOR CODE COMPLIANCE	
		RECORDING FEES FOR CODE COMPLIANCE	
		RECORDING FEES FOR CODE COMPLIANCE	

Date	Check Number / Vendor Name/ Project	Transaction Description	Amount
		RECORDING FEES FOR CODE COMPLIANCE	
		RECORDING FEES FOR CODE COMPLIANCE	
		RECORDING FEES FOR CODE COMPLIANCE	
9/30/2025	300714 KIRK D. ZILKE		25.80
		K.ZILKE PRE-DELIVERY INSPECT T25265 102	
9/30/2025	300715 KONICA MINOLTA BUSINESS SOLUTIONS		436.46
		COPIER LEASE 8/1-31/25 PUBLIC WORKS	
		COPIER LEASE 7/1-31/25 PUBLIC WORKS	
9/30/2025	300719 MISC CUSTOMER REFUNDS		248.42
		REFUND OF FEES FOR DAILY POOL PASS	
		REFUND OF TAXES FOR DAILY POOL PASS	
		REFUND OF FEES FOR DAILY POOL PASS	
		REFUND OF FEES FOR DAILY POOL PASS	
		REFUND OF FEES FOR DAILY POOL PASS	
		REFUND OF TAXES FOR DAILY POOL PASS	
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		REFUND OF TAXES FOR DAILY POOL PASS	
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		REFUND OF TAXES FOR DAILY POOL PASS	
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		REFUND OF TAXES FOR DAILY POOL PASS	

Date	Check Number / Vendor Name/ Project	Transaction Description	Amount
		REFUND OF FEES FOR DAILY POOL PASS	
		REFUND OF TAXES FOR DAILY POOL PASS	
		REFUND OF TAXES FOR DAILY POOL PASS	
		REFUND OF TAXES FOR DAILY POOL PASS	
		REFUND OF FEES FOR DAILY POOL PASS	
		REFUND OF TAXES FOR DAILY POOL PASS	
		REFUND OF TAXES FOR DAILY POOL PASS	
		REFUND OF TAXES FOR DAILY POOL PASS	
		REFUND OF DEPOSIT CIVIC CENTER	
		REFUND OF TAXES FOR DAILY POOL PASS	
		REFUND OF TAXES FOR DAILY POOL PASS	
9/30/2025	300720 LISSETTE OSORIO		41.30
		L.OSORIO BLOOD ANALYSIS CONFERENCE T25259 102	
9/30/2025	300721 MISC CUSTOMER REFUNDS		1,481.50
		REFUND OF PAYMENT FOR 12/28/25 RESERVATION	
		REFUND OF DEPOSIT COMM CENTER MAGNOLIA ROOM	
		REFUND OF FEES COMM CENTER MAGNOLIA ROOM	
		REFUND OF TAXES COMM CENTER MAGNOLIA ROOM	
9/30/2025	300722 MISC CUSTOMER REFUNDS		500.00
		REFUND OF DEPOSIT LKFRNT PARK BANQUET HALL	
9/30/2025	300723 MISC CUSTOMER REFUNDS		250.00
		REFUND OF DEPOSIT CIVIC CENTER GYM B	
9/30/2025	300724 MATTHEW HEIL		23.88
		M.HEIL CENTRAL FL GIS WRKSHP T25211 102	
9/30/2025	300725 MICHAEL TENNARO		21.30
		MICHAEL TENNARO, NRPA CONFERENCE, T25278, 103	
9/30/2025	300726 MISC CUSTOMER REFUNDS		200.00
		RFND DEPOSIT CANNERY PRK VOID-REISSUE CK#300578	
9/30/2025	300727 POINT AND PAY, LLC.		32.50
		AUGUST 2025 INVOICE 65 ECHECKS	

Date	Check Number / Vendor Name/ Project	Transaction Description	Amount
9/30/2025	300728 RAPCO SUPPLY		1,122.15
		A/C SERVICES	
		A/C REPAIRS	
		A/C REPAIRS	
9/30/2025	300729 REHRIG PACIFIC COMPANY		36,150.00
		EG RECYCLE ROC PEPSI BLUE SHIPPING PO084987	
		CREDIT MEMO PSL PO084987	
		EG RECYCLE ROC PEPSI BLUE SHIPPING	
		CREDIT MEMO SHIPPING PO084987	
		EG RECYCLE ROC PEPSI	
9/30/2025	300730 R2 UNIFIED TECHNOLOGIES, LLC		600.15
		MICROSOFT AZURE USAGE AUG25	
9/30/2025	300731 MISC CUSTOMER REFUNDS		500.00
		REFUND OF DEPOSIT BOAT SLIP #9	
9/30/2025	300732 SERVPRO OF OSCEOLA COUNTY		8,741.10
		WATER RESTORATION	
9/30/2025	300733 SHEREKA ROBINSON		171.69
		S.ROBINSON 2025 FL PLAN CONFERENCE T25245 102	
9/30/2025	300734 SHI INTERNATIONAL CORP		32,058.20
		SOCRADAR SUBSCRIPTION 9/29/25-9/29/26 PO085112	
		MICROSOFT SELECT 9/1/25 - 8/31/25	
		SOCRADAR SUBSCRIPTION 9/29/25 - 9/29/26	
		MICROSOFT SELECT 9/1/25 - 8/31/25 PO085060	
		MICROSOFT SELECT 9/1/25 - 8/31/25 PO085060	
		SOCRADAR SUBSCRIPTION 9/29/25-9/29/26 PO085112	
9/30/2025	300735 STARR MECHANICAL, INC.		81,067.00
		BLDG A HVAC REPLACEMENT	
9/30/2025	300736 SUNSHINE STRUCTURES, LLC		13,980.00
	PS2105 FIRE TRAINING FACILITY	SHEDS- CORD AVE FIRE TRAINING FACILITY	
	PS2110 TEMP FIRE STATION 34	SHEDS- CORD AVE FIRE TRAINING FACILITY	

City of St. Cloud

FY26 Warrant List #01

10/01/2025 to 10/31/2025

Date	Check Number / Vendor Name/ Project	Transaction Description	Amount
9/30/2025	300737 TETRA TECH, INC.		1,222.20
		FS #33 TRAFFIC SIGNAL	
9/30/2025	300738 THE ARMORY LLC		1,852.00
		GOOD DUDE PRY BAR 1.0 MAT mMATTE BLACK	
9/30/2025	300739 TOWLANDO TOWING & RECOVERY INC.		6,039.00
		TOWING SERVICES UNIT#24-68 RO-65024-1	
9/30/2025	300740 TRANSCOR SUPPLY INC.		2,850.00
		MOTORIZED MOBILITY DEVICE FOR CUSTOM SIGN P&R	
		SQUARE POST FOR PARKS AND RECS	
9/30/2025	300741 TRIPLE M BASEBALL, LLC		7,200.00
	PR2106 17TH STREET BALLFIELDS	FOUL POLE	
9/30/2025	300742 VERONICA C. MILLER		27.09
		V.MILLER 2025 FL PLANNING CONFERENCE T25271 102	
9/30/2025	300743 ZOPAX INSPECTIONS AND SERVICE, LLC		1,835.06
		BACKFLOW REPAIRS AT TED BRODA PARK	
9/26/2025	7007810 INTERNAL REVENUE SERVICE		438,528.38
		PAYROLL SUMMARY	
		PAYROLL SUMMARY	
		PAYROLL SUMMARY	
9/26/2025	7007811 FLSDU		4,840.22
		PAYROLL SUMMARY	
		PAYROLL SUMMARY PROCESSING FEE	
9/30/2025	7007812 U.S. BANK NA		25,282,778.23
		ESTABLISH INVESTMENT CUSTODY ACCTS WITH USBANK	
9/30/2025	7007813 U.S. BANK NA		25,282,778.22
		ESTABLISH INVESTMENT CUSTODY ACCTS WITH USBANK	
9/30/2025	7007814 FLORIDA DEPARTMENT OF REVENUE		5,175.00

Date	Check Number / Vendor Name/ Project	Transaction Description	Amount
		CITATION FEES DUE TO FDOR WEEK ENDING (09/26/2025)	
	Grand Total		51,665,573

Finance Committee Budget Report

BACKGROUND

FY 24-25 Fourth Quarter Budget Report
Updated / Unaudited (as of September 30, 2025)

October 21, 2025, 2025

Purpose

The purpose of this presentation is to present highlights of the City of St. Cloud Fourth Quarter Budget Report.

The report presents an overview of the City's revenues, expenditures and key department statistics for the fiscal year.

Reported Period :

October 1, 2024 – September 30, 2025

Updated / Unaudited (as of October 7, 2025)

TOP 10 REVENUES

	Budget	Actual	% Collected
Ad Valorem Taxes	$ 25,760,718	$ 25,783,895	100.1%
Impact Fees	$ 13,516,097	$ 17,123,395	126.7%
St. Cloud / OUC Interlocal	$ 12,559,854	$ 12,559,854	100.0%
Infrastructure Sales Tax 1%	$ 8,723,556	$ 7,807,693	89.5%
Refuse Service Fees	$ 7,393,788	$ 7,587,255	102.6%
Half Cent Sales Tax	$ 5,562,848	$ 4,563,061	82.0%
Public Service Utility Taxes	$ 4,244,193	$ 4,178,940	98.5%
St. Cloud / TOHO Interlocal	$ 4,425,974	$ 4,073,679	92.0%
Stormwater Service Fees	$ 4,583,844	$ 4,742,246	103.5%
County Gas Taxes	$ 1,506,132	$ 1,420,177	94.3%
Total	$ 88,277,004	$ 89,840,195	101.8%

As of: September 30, 2025

MAJOR FUND REVENUES

	Budget	Actual	% of Budget
General Fund	$ 84,771,627	$ 75,833,758	89.59%
Sanitation Fund	$ 21,768,147	$ 19,145,780	88.0%
Building Fund	$ 4,346,256	$ 4,538,249	104.4%
Stormwater Fund	$ 5,764,729	$ 5,032,830	87.3%

As of: September 30, 2025

MAJOR FUND EXPENDITURES

	Budget	Actual	% of Budget
General Fund	$ 84,771,627	$ 75,192,522	88.7%
Sanitation Fund	$ 21,768,147	$ 19,664,338	90.3%
Building Fund	$ 4,346,256	$ 4,070,108	93.7%
Stormwater Fund	$ 5,764,729	$ 3,793,278	65.8%

As of: September 30, 2023

MAJOR FUND
Surplus / (Deficit)

	Revenues	Expenditures	Preliminary Surplus / (Deficit)
General Fund	$ 75,833,758	$ 75,192,522	$ 641,236
Sanitation Fund	$ 19,145,780	$ 19,664,338	$ (518,558)
Building Fund	$ 4,538,249	$ 4,070,108	$ 468,141
Stormwater Fund	$ 5,032,830	$ 3,793,278	$ 1,239,552

As of: September 30, 2025

GENERAL FUND DEPARTMENTAL EXPENDITURES/ENCUMBRANCES

	Budget	Expenditures	% Expended	Encumbrances	% Expended + Encumbered
City Council*	$1,514,875	$851,944	56.2%	$24,879	57.9%
Legal Services	$534,517	$243,548	45.6%	$49,077	54.7%
City Manager	$1,687,673	$1,338,915	79.3%	$309,381	97.7%
Public Information	$904,840	$756,553	83.6%	$49,436	89.1%
City Clerk	$828,100	$579,531	70.0%	$6,573	70.8%
Human Resources	$1,704,796	$1,544,200	90.6%	$17,855	91.6%
Procurement	$2,122,836	$1,644,575	77.5%	$245,356	89.0%
Finance	$2,237,428	$1,962,257	87.7%	$117,509	93.0%
Information Technology	$4,582,599	$3,388,921	74.0%	$885,566	93.3%
Planning/Zoning	$3,924,179	$3,072,996	78.3%	$263,000	85.0%
Police	$27,839,414	$27,135,833	97.5%	$348,618	98.7%
Fire	$18,872,685	$17,574,982	93.1%	$974,383	98.3%
Public Works	$5,847,105	$4,773,627	81.6%	$365,610	87.9%
Parks & Recreation	$11,242,203	$9,324,869	82.9%	$232,212	85.0%
Total	**$83,843,250**	**$74,192,751**	**88.5%**	**$3,889,455**	**93.1%**

*Includes $450,209 budgeted in City Council Contingency.

As of: September 30, 2025

Thank you.